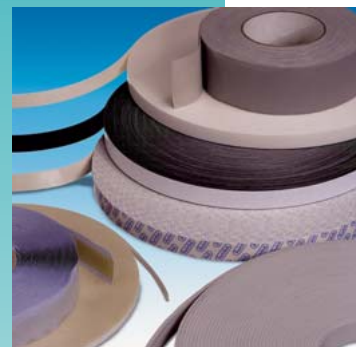


## SEALANTS AND ADHESIVES



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**Subject to change.**

Supply of goods is in conformity with our delivery and payment conditions.

**Gebr. TITGEMEYER GmbH & Co. KG**  
Osnabrück

## Tradition and expertise for over 100 years

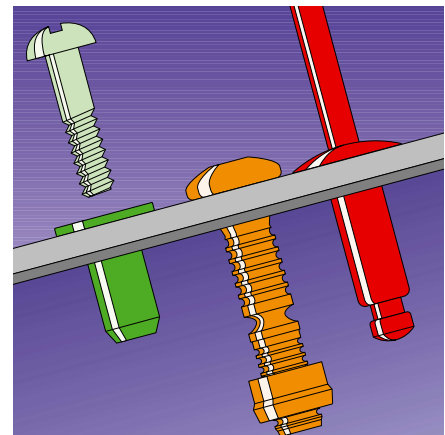
The two brothers, Adolf and Fritz Titgemeyer, established an ironware wholesale business around the turn of the century in their hometown of Melle. A few years later, business rooms were opened in the neighbouring town of Osnabrück. Since then, the business enterprise group, Titgemeyer, has continuously developed and today is a leader in the fields of bonding techniques and utility vehicles.

The medium sized family organization is now led by the third generation - always with the aim of supplying the optimum solution for the customer - from single fixings right up to complex building kit systems.



## Bonding Technologies

The more varied the requirements, the more individual is our solution. The result: a widely based product range of the most modern jointing systems. New products arrive constantly - because industry and the home worker demand specially designed solutions. TITGEMEYER introduced the POP® blind rivet to the German market. Its application revolutionised traditional jointing technology.



## The TITGEMEYER jointing product range

- Blind riveting techniques
- Threaded carriers
- Rapid assembly systems
- Processing technologies

## Vehicle components with style

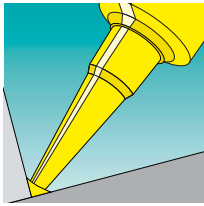
The ideas and wishes of our customers are our measurement standard. That is why we carefully develop products and produce for assembly and construction of modern utility vehicles. Safety, economics and the environment - these requirements are all satisfied by our product range. The first pre-fabrication system for container trucks, GETO® VAN, is today only one of the system solutions available from TITGEMEYER.

## The TITGEMEYER vehicle component range

- System packs
- Chassis technologies
- Bodywork components
- Platform systems
- Sealants and adhesives

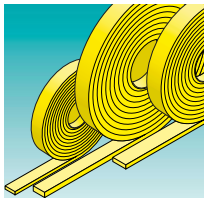


## SEALANTS AND ADHESIVES ... AT A GLANCE



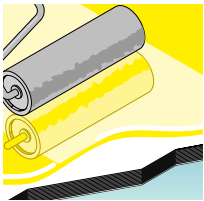
### Sealants and adhesives

- Complete range for vehicle construction, OEM, trade and industry
- Top quality products
- All requirements met
- State-of-the-art product development



### Sealing and adhesive tapes

- For cleanly sealing and bonding numero
- Suitable for many applications
- Perfect as a fixing aid



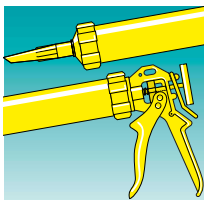
### Floor covering systems

- Plastic or synthetic rubber coatings
- For vehicle floors, ramps, garages, st
- Easy to lay
- Meets food safety requirements
- Very hard-wearing
- Jointless complete sealing system



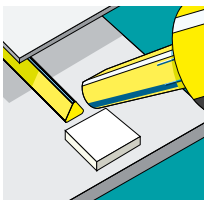
### Preparation

- Pre-treatment products and tables
- For the corresponding substrates
- Compatible with the range of sealants and adhesives



### Working tools

- Mechanical, pneumatic, electric
- Tools for handling cartridge and bagge



### Accessories

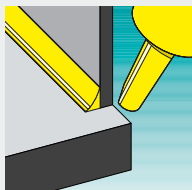
- Application aids
- Smoothing tools
- Cartridge cutters
- Cartridge tips
- Wiping cloths
- Grinding fleece

<b>D+K</b>	Sealants and adhesives	1-part polyurethane	<b>GETO®</b> PUR 21 .....	81.01.11
			<b>GETO®</b> PUR 52 .....	81.01.12
			<b>GETO®</b> PUR 28 .....	81.01.13
		2-part polyurethane	<b>GETO®</b> PUR 2090 .....	81.02.11
			Körapur 840 .....	81.02.20
			Körapur 648 .....	81.02.21
			Körapur 672 .....	81.02.22
		1-part MS polymers	<b>GETO®</b> MSP 145 .....	81.03.10
			<b>GETO®</b> MSP 152 .....	81.03.11
			<b>GETO®</b> MSP 155 .....	81.03.12
			<b>GETO®</b> MSP 180 .....	81.03.13
		Butyls (sprayable)	Sealant Ti Butyl .....	81.04.10
			Dekaseal 8936 .....	81.04.20
		Silicons	Bostic construction silicon (neutral sys) .....	81.05.10
			Bostic sanitary silicon (acetate sys) .....	81.05.20
			Nibosil 3057 HT (high temperature) .....	81.05.30
		Contact adhesives	Plastigum .....	81.06.10
			technicoll® 8053 .....	81.06.20
			Nibopren N 730 .....	81.06.30
	Sealing and adhesive tapes	Single-sided adhesive	PVC foam tape 3257/59 .....	82.01.01
			PVC foam tape 3507/09 .....	82.01.02
		Double-sided adhesive	Rubber resin adhesive tape 0485 .....	82.02.01
			Power Bond 5300 .....	82.02.02
			PE foam adhesive tape 5454 .....	82.02.03
			PE foam adhesive tape 5464 .....	82.02.04
			PE foam adhesive tape 5474 .....	82.02.05
			PE foam adhesive tape 5589 .....	82.02.06
			PUR foam adhesive tape 5669 .....	82.02.07
		Butyl tapes	Butyl sealing tape 0303 .....	82.03.01
			Butyl sealing tape 0390 .....	82.03.02
			Butyl sealing tape 0316 .....	82.03.03
			Bostic Prestik tape AE 3301 .....	82.03.04
			Prestik kneading seal .....	82.03.05
	Floor covering systems	Polyurethane based	<b>GETO®</b> Marothaan .....	83.01.01
		Natural rubber based	<b>GETO®</b> Horsefloor .....	83.02.01
	Preparation	1-part polyurethane	<b>GETO®</b> PUR Cleaner 1 .....	84.01.01
			<b>GETO®</b> PUR Cleaner 2 .....	84.01.02
			Körabond HG 77 .....	84.01.03
			Pre-treatment table .....	84.01.04
		2-part polyurethane	Körapox BS 85 .....	84.02.01
			Körabond HG 79 .....	84.02.02
			Pre-treatment table .....	84.02.03
		1-part MS Polymers	<b>GETO®</b> MSP Cleaner 1 .....	84.03.01
			<b>GETO®</b> MSP Cleaner 2 .....	84.03.02
			Preparation tables .....	84.03.03
		Thinners and cleaners	Bostik Solvent 270 .....	84.04.01
			Bostik Solvent 280 .....	84.04.01
			Bostik Solvent 300 .....	84.04.01
		Cleaners	Snowclean .....	84.05.01
			Marine S/P. alk. cleaner/degreaser .....	84.05.03

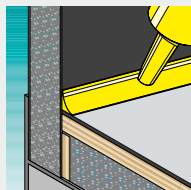
<b>D+K</b>	Working tools	Mechanical	<b>GETO®</b> Handtool 1 .....	85.01.01
			<b>GETO®</b> Handtool 2 .....	85.01.01
			<b>GETO®</b> Handtool 3 .....	85.01.01
			<b>GETO®</b> Handtool 4 .....	85.01.01
			Paint roller .....	85.01.01
			Toothed spreader .....	85.01.01
			Velcro roller .....	85.01.01
			Nail shoe .....	85.01.01
			Stirrer .....	85.01.01
			<b>GETO®</b> cartridge cutter .....	85.01.01
		Pneumatic	<b>GETO®</b> Airtool 1 .....	85.02.01
			<b>GETO®</b> Airtool 2 .....	85.02.01
			<b>GETO®</b> Airtool 3 .....	85.02.01
			<b>GETO®</b> Airtool 4 .....	85.02.01
			<b>GETO®</b> Airtool 5 .....	85.02.01
			Spray gun .....	85.02.01
		Electrical	Battery gun .....	85.03.01
			Makita drilling machine .....	85.03.01
	Accessories	Aids	<b>GETO®</b> Fixpoints .....	86.01.01
			<b>GETO®</b> sanding material .....	86.01.01
			Emery cloth .....	86.01.01
			Wipes .....	86.01.01
			<b>GETO®</b> joint set .....	86.01.01
			Adapter for container on standard nozzle .....	86.01.01
			<b>GETO®</b> MSP/PU-Remover Simson .....	86.01.01
			Cartridge nozzle .....	86.01.01
			Container nozzle .....	86.01.01
		Tables	Use of adhesives .....	86.02.01



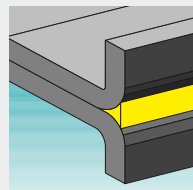
Universally applicable



Seals and bonds



Clean, secure, leak-proof



Seam, contact, raised joint



GETO PUR 21

## Brief description

### Description

### Universal sealant/adhesive

Single component, elastic sealant / adhesive based on PU, which hardens in the presence of moisture in the air. Very good adhesion on primed and painted metals, aluminium, timber, various synthetic materials. General application in metal and synthetic material processing in industry and in manual applications.

### Features

- short adhesive threads
- one part
- elastic
- can be painted, polished
- seals, bonds
- meets food safety requirements as specified by ISEGA

### Applications

- bodywork, vehicle, container construction
- ventilation and air conditioning units
- metal, ship and boat building

### Paint compatibility

GETO PUR 21 can be painted over with commercially available, industrial single and two-part car repair spray paints when cured. As a rule, a strengthened skin formation, i.e. after two hours, is sufficient for trouble free painting. If attempted too soon, extensive bubbles can form and can prevent the sealant from curing properly. It is to be noted that normal paint systems are inflexible, which, on top of an elastic sealant/adhesive, can lead to tearing. If a smoothing material is applied to smooth out the seam, then care should be taken to ensure that the outer surface is cleaned before painting as sanding residues can impair paint adhesion. We recommend GETO PUR 21 Cleaner 2 for polishing, as this has no effect on paint adhesion.

### Delivery

Colour	Cartridge 310 ml (SP 12)	Pouch 300 ml (SP 12)	Pouch 600 ml (SP 12)
white	<b>850 100</b>	<b>850 120</b>	<b>850 110</b>
grey	<b>850 101</b>	<b>850 121</b>	<b>850 111</b>
black	<b>850 102</b>	<b>850 122</b>	<b>850 112</b>
dark brown	<b>850 107</b>	—	<b>850 117</b>

\* 23 kg pail on request

GETO PUR 21 Cleaner 1, 1000 ml tin: **Part No. 850 190**

GETO PUR 21 Cleaner 1, 5000 ml tin: **Part No. 850 191**

GETO PUR 21 Cleaner 2, 1000 ml tin: **Part No. 850 192**

The advice contained in this Data Sheet is based on our laboratory researches and experience. No assurance can be given for the results of processes in individual cases on account of the variety of application possibilities, conditions of storage and conditions of application that are outside our control. Individual trials should be carried out. Our sales and technical advice centres are available for consultation. Publication of this Data Sheet replaces all previous editions. For additional information see the Safety Data Sheet.

81.01.11.2  
Sealents and adhesives  
1-part polyurethane  
**GETO® PUR 21**

**Processing notes**

Working with commercially available hand or compressed air guns, e.g. with the quality TITGEMEYER tools "GETO Handtool" and "GETO Airtool", in the temperature range +5 °C and +35 °C. Note the points regarding "Paint compatibility". For compressed air working, pressures of 2 to 6 bar are required. Lower material temperatures lead to increases in viscosity, higher temperatures mean lower viscosities.

Depending upon the range of ambient temperatures and humidity, the sealing seam must be smoothed out if necessary within the skin forming time. For this purpose we recommend GETO PUR Cleaner 2.

**Bonding**

Apply the material with a spreader or a GETO tool onto the surface. The thickness of application depends upon the characteristics of the materials involved. The counter piece (piece to be stuck) should be positioned within 10 minutes and pressed into position. Depending upon the consistency, it may be necessary to secure the materials until hardening is complete. Curing time is dependent upon temperature and on air humidity.

**Surface preparation**

Surfaces must be clean, dry and free from grease. Adhesion and compatibility with synthetic materials and paints must be checked with the materials. For improved performance on non-porous surfaces, such as glass, GFK, aluminium, stainless steel, steel untreated or galvanised, we recommend pre-cleaning with GETO PUR Cleaner 1 or GETO PUR Cleaner 2 in accordance with the current GETO pre-treatment table.

**Storage, transport,  
safety regulations**

- Store dry, closed in original packing from +5 °C to +25 °C
- Transport class not applicable.
- Product contains isocyanide
- See Safety Data Sheet

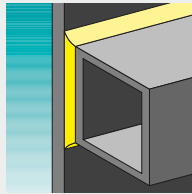
**Material Specifications**

Base	polyurethane, isocyanide
Colour	white, grey, black, dark brown
Curing agent	air humidity
Density	1.2 g/cm <sup>3</sup>
Viscosity	medium consistency, good rigidity
Thread forming	short
Volume change DIN 52451	approx. 6%
Skin forming time*	approx. 45 min
Rate of hardening 24 hrs*	approx. 3 mm
Tensile strength DIN 53504	2.1 N/mm <sup>2</sup>
Shear strength DIN 53281	approx. 1,5 N/mm <sup>2</sup> (for 2mm layer thickness)
Breaking strain DIN 53504	approx. 450%
Shore A hardness DIN 53505	45
Temperature stability	-40 °C to +90 °C/short term to +120 °C
Working temperature	+5 °C to +35 °C
Storage temperature	+5 °C to +25 °C dry
Shelf life	9 months, unopened in original packing

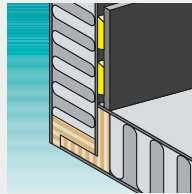
*\* Measured at 23 °C ambient temperature and 50% relative humidity*

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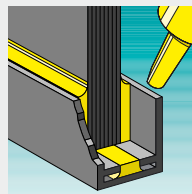




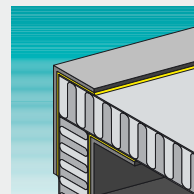
*Bonding of sheet metal  
onto grid frames*



*Bonding of strips*



*Bonding of profiles*



*Rapid initial adhesion*



*GETO PUR 52*

## Brief description

### Description

### Stable constructional adhesive

Single component, elastic sealant/adhesive based on PU, which hardens in the presence of moisture in the air. Very good adhesion on primed and painted metals, aluminium, timber, various synthetic materials. General application in metal and synthetic material processing in industry and in manual applications.

### Features

- short adhesive threads
- one part
- elastic
- can be painted, ground
- bonds+seals

### Special features

- highly stable
- high adhesion in wet
- short thread formations
- rapid initial setting
- high final adhesion

### Applications

- bodywork, vehicle, container construction
- ventilation and air conditioning units
- metal, ship and boat building

### Typical applications

- bonding side metal sheets onto grid frame constructions
- bonding sandwich boards into frame profiles
- bonding strips

### Paint compatibility

GETO PUR 52 can be painted over with commercially available, industrial single and two-part car repair spray paints when cured. As a rule, a strengthened skin formation, i.e. after two hours, is sufficient for trouble free painting. If attempted too soon, extensive bubbles can form and can prevent the sealant from curing properly. It is to be noted that normal paint systems are inflexible, which, on top of an elastic sealant/adhesive, can lead to tearing. If a smoothing material is applied to polish the seam, then care should be taken to ensure that the outer surface is cleaned before painting as cleaning residues can impair paint adhesion. We recommend GETO PUR Cleaner 2 for smoothing, as this has no effect on paint adhesion.

The advice contained in this Data Sheet is based on our laboratory researches and experience. No assurance can be given for the results of processes in individual cases on account of the variety of application possibilities, conditions of storage and conditions of application that are outside our control. Individual trials should be carried out. Our sales and technical advice centres are available for consultation. Publication of this Data Sheet replaces all previous editions. For additional information see the Safety Data Sheet.

81.01.12.2  
Sealants and adhesives  
1-part polyurethane  
**GETO® PUR 52**

**Delivery**

Colour	Cartridge 310 ml* (SP 12)	Pouch 600 ml* (Sp 12)
white	<b>850 200</b>	<b>850 210</b>
black	<b>850 202</b>	<b>850 212</b>

\* 23 kg pail on request

GETO PUR Cleaner 1, 1000 ml tin: **Part No. 850 190**

GETO PUR Cleaner 1, 5000 ml tin: **Part No. 850 191**

GETO PUR Cleaner 2, 1000 ml tin: **Part No. 850 192**

**Processing notes**

Work with commercially available hand or compressed air guns, e.g. with the quality TITGEMEYER products "GETO Handtool" and "GETO Airtool", in the temperature range +5 °C and +35 °C. Note the points regarding "Paint compatibility". For compressed air working, pressures of 2 to 6 bar are required. Lower material temperatures lead to increases in viscosity, higher temperatures mean lower viscosities. Depending upon the range of ambient temperatures and humidity, the sealing seam must be smoothed out within the skin forming time. For this purpose we recommend GETO PUR Cleaner 2.

**Bonding**

Apply the material with a spreader or a GETO tool onto the surface. The thickness of application depends upon the characteristics of the materials involved. The counter piece (piece to be stuck) should be positioned within 10 minutes and pressed into position. Depending upon the consistency, it may be necessary to secure the materials until hardening is complete. Curing time is dependent upon temperature and on air humidity.

**Surface preparation**

The surface must be clean, dry and free of grease. Adhesion and compatibility with synthetic materials and paints must be checked against the materials. To improve performance on non-porous surfaces, such as glass, GFK, aluminium, stainless steel, steel untreated or galvanised, we recommend pre-cleaning with GETO PUR Cleaner 1 or GETO PUR Cleaner 2 in accordance with the current GETO pre-treatment table.

**Storage, transport,  
safety regulations**

Store dry, closed in original packing from +5 °C to +25 °C

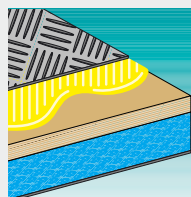
Transport class not applicable • Product contains isocyanide • See Safety Data Sheet

**Material Specifications**

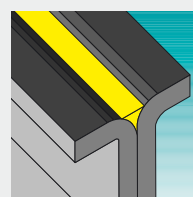
Base	polyurethane, isocyanide
Colour	white, black
Curing agent	air humidity
Density	1.2 g/cm <sup>3</sup>
Viscosity	high consistency, good rigidity
Thread forming	short
Volume change DIN 52451	approx. 7%
Skin forming time*	approx. 45 min
Rate of hardening 24 hrs*	approx. 3 mm
Tensile strength IN 53504	4 N/mm <sup>2</sup>
Shear strength DIN 53281	ca. 3 N/ mm <sup>2</sup> (for 2mm layer thickness)
Breaking strain DIN 53504	400%
Shore A hardness DIN 53505	55
Temperature stability	-40 °C to +90 °C/short term to +120 °C
Working temperature	+5 °C to +35 °C
Storage temperature	+5 °C to +25 °C dry
Shelf life	9 months, unopened in original packing

\* Measured at 23 °C ambient temperature and 50% relative humidity

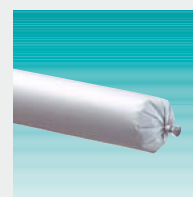
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Bonding surfaces



Seam, contact, raised joint



GETO PUR 28

## Brief description

## Low viscosity, large surface area adhesive

### Description

Single component, elastic, self-spreading sealant/adhesive based on polyurethane, which sets on reaction to air humidity. For primed and painted metals, aluminium, VA steel, timber products, Duroplasts.

### Features

- one part
- elastic
- good flowing characteristics
- smooths out tolerances (accommodates thermal and dynamic movements)
- suppresses spatial and footfall sounds
- can be painted, polished

### Applications

As large surface area adhesive for sheets of, for example:

- PUR hard foam
- VA sheets
- AL sheets
- GFK boards

For pouring in floor joints, seams, and overlaps in:

- case construction
- container construction
- trailers in general
- general industrial use

### Paint compatibility

GETO PUR 28 can be painted over with commercially available, industrial single and two-part car repair spray paints when cured. As a rule, a strengthened skin formation, i.e. after two hours, is sufficient for trouble free painting. If attempted too soon, extensive bubbles can form and can prevent the sealant from curing properly. It is to be noted that normal paint systems are inflexible, which, on top of an elastic sealant/adhesive, can lead to tearing. If a polishing material is applied to polish the seam, then care should be taken to ensure that the outer surface is cleaned before painting as cleaning residues can impair paint adhesion. We recommend GETO PUR Cleaner 2 for polishing, as this has no effect on paint adhesion.

### Delivery

Colour	Pouch 600 ml (SP 12)	Pail 23 kg
white	850 000	850 001 <sup>1</sup>

<sup>1</sup> LZ on request

GETO PUR Cleaner 1, 1000 ml tin: **Part No. 850 190**

GETO PUR Cleaner 1, 5000 ml tin: **Part No. 850 191**

GETO PUR Cleaner 2, 1000 ml tin: **Part No. 850 192**

81.01.13.2  
Sealants and adhesives  
1-part polyurethane  
**GETO® PUR 28**

**Processing notes**

Working with commercially available hand or compressed air guns, e.g. with the quality TITGEMEYER tools "GETO Handtool" and "GETO Airtool", in the temperature range +5 °C and +35 °C. Note the points regarding "Paint compatibility". For compressed air working, pressures of 2 to 6 bar are required. Lower material temperatures lead to increases in viscosity, higher temperatures mean lower viscosities. Depending upon the range of ambient temperatures and humidity, the sealing seam must be smoothed out within the skin forming time. For this purpose we recommend GETO PUR Cleaner 2.

**Bonding**

Apply the material with a spreader or a GETO tool onto the surface. The thickness of application depends upon the characteristics of the materials involved. The counter piece (piece to be stuck) should be positioned within 10 minutes and pressed into position. Depending upon the consistency, it may be necessary to secure the materials until hardening is complete. Curing time is dependent upon temperature and air humidity.

**Surface preparation**

The surface must be clean, dry and free of grease. Adhesion and compatibility with synthetic materials and paints must be checked against the materials. For improved performance on non-porous surfaces, such as glass, GFK, aluminium, stainless steel, steel untreated or galvanised, we recommend pre-cleaning with GETO PUR Cleaner 1 or GETO PUR Cleaner 2 in accordance with the current GETO pre-treatment table.

**Storage, transport,  
safety regulations**

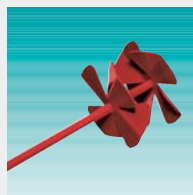
Store dry, closed in original packing from +5 °C to +25 °C  
Transport class not applicable • Product contains isocyanide • See Safety Data Sheet

**Material Specifications**

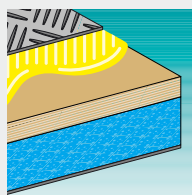
Base	polyurethane, isocyanide
Colour	white
Curing agent	air humidity
Density	1.2 g/cm <sup>3</sup>
Viscosity	low, liquid, somewhat spreading
Thread forming	short
Volume change DIN 52451	approx.. 9%
Skin forming time*	approx. 35 min
Rate of hardening 24 hrs*	approx. 3 mm
Tensile strength DIN 53504	2.0 N/mm <sup>2</sup>
Breaking strain DIN 53504	450%
Shore A hardness DIN 53505	45
Temperature stability	-40 °C to +90 °C/short term to +120 °C
Working temperature	+5 °C to +35 °C
Storage temperature	+5 °C to +25 °C dry
Shelf life	9 months, unopened in original packing

\* Measured at 23 °C ambient temperature and 50% relative humidity

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Stirrer (mixer)



Surface jointing



2-component PU adhesive



GETO PUR 2090

## Brief description

### Description

### Tough, high consistency, assembly adhesive

Solvent free, two component, reaction adhesive for assembly of sandwich components and for construction and repair work in container, bodywork, vehicle and especially freezer vehicle construction. Also, for gluing utility vehicle floors, e.g. aluminium slotted sheeting on wood. Excellent adhesion on aluminium, timber, hard PVC and GFK. Rapid, uniform curing, especially suited for wood fixings.

GETO PUR 2090 is prepared as tough and highly viscous.

### Features

- tough with very high adhesion
- moisture tolerant, specially suitable for wood fixing
- rapid, uniform curing
- can be trowel spread, suitable for vertical surfaces
- wide adhesion spectrum in general
- pot time: 90 min/open time: 150 min
- can be accelerated

### Delivery

- 350 g mix cartridge (A+B), SP 12 per carton: **Part No. 870 000**
- Stirrer for mix cartridge, SP 12 per carton: **Part No. 860 110**
- NOTE:
  1. Insert cartridge into gun and clamp in position with actuator (prevents movement of cartridge piston while mixing).
  2. Insert stirrer with the threaded end into the nozzle opening and screw in the cartridge separator disc in an clockwise direction till it clicks.
  3. Using an "air pump action" move stirrer forwards and backwards vigorously till the mixture has a uniform colour.
  4. Draw stirrer upwards to the endstop and unscrew. Screw on the standard cartridge nozzle and process completely.
- 6 kg tin component A-GETO PUR 2090: **Part No. 870 001**
- 1 kg tin component B-GETO PUR B10(hardener): **Part No. 870 010**
- Larger pack on request, available on short delivery
- GETO PUR Cleaner 2, 1000 ml container **Part No. 850 192**
- Metal primer Körapox BS 85, 5 litre pack (A+B): **Part No. 830 132**
- Körabond metal primer HG 79, 500 g pack: **Part No. 870 825 000**
- Köracur PU accelerator, 50 g pack: **Part No. 870 830 000**

### Tools required

- Stirrer (mixer): **Part No. 840 094**
- Cartridge guns GETO hand and air tools

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## Preparation and working

Surfaces must be clean, dry, dust and grease free.\*

In general, metals must be pre-treated, abrade if necessary. Pre-treatment with Körapox BS 85 (two-component) can also be carried out. The primer improves the ageing behaviour of the adhesion bond as well as the hydrolytic resistance.

Using a mixing machine (approx. 400 r.p.m.) thoroughly mix A and B components together till the mixture has a uniform colour. Re-pot if necessary.

Spread the mixture evenly on the surfaces to be stuck using a spreader and then bring the surfaces together. The spreading thickness is dependent upon the characteristics of the surfaces being bonded. The joint can be lightly loaded after 12 – 16 hours. Final curing is achieved between 30 and 36 hours. Higher temperatures shorten the setting time, lower temperatures extend this time.

Clean tools immediately after use. Hardened materials can only be removed mechanically.

Avoid skin contact when working with the material; wear protective gloves.

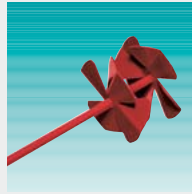
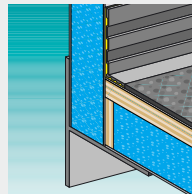
Read the "Data Sheet on Working with PUR Spreadable Materials" of the main association of Commercial Cooperatives, Central Office for Accident Prevention.

## Material Specifications

Base	polyurethane, two-component, solvent free
Colour	beige
Density	1.70 g/cm <sup>3</sup> (resin)
	1.23 g/cm <sup>3</sup> (hardener)
	1.63 g/cm <sup>3</sup> (mixture)
Viscosity	Structurally viscous (resin)
	200 mPas (hardener)
	50.000 mPas (mixture)
Mixing ratio	Resin to hardener 6:1 by weight
Pot time	approx. 90 min
Open time	approx. 150 min
Initial adhesion	approx. 12 - 16 hrs at 20 °C
Tensile strength All./wood	17 N/mm <sup>2</sup> at -20 °C
	14 N/mm <sup>2</sup> at 20 °C
	3.5 N/mm <sup>2</sup> at 80 °C
Working temperature	+15 °C to +25 °C
Temperature stability	-30 °C to +120 °C/short term to +150 °C
Min. storage temperature	10 °C
Shelf life	12 months

\* for preparation of grounds, see our pre-treatment tables:  
adhesion with Körapur 2-component and GETO PUR 2-component adhesives

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*Stirrer (mixer)**Strip jointing**2-component PU adhesive**Körapur 840*

## Brief description

## Description

### Tough elastic, structural adhesive

Solvent free, two component, reaction adhesive for manufacture of sandwich components and for construction and repair work in container, bodywork, vehicle and specially freezer vehicle construction. Also, for gluing weight-carrying internal coverings e.g. lashing strips, base boards. Wide adhesion spectrum on aluminium, timber, hard PVC and GFK. Rapid, uniform curing; because of high movement capability, specially suitable for metal/metal adhesive joints.

**Körapur 840 is prepared as tough elastic viscous.**

## Features

- tough elastic, with very high adhesion
- high cold flexibility and impact absorption capability
- high movement tolerance, specially for metal/metal joints
- rapid, uniform curing
- can be trowel spread, suitable for vertical surfaces
- wide adhesion spectrum also on PES powdered sections
- pot time: 45 minutes/open time: 60 – 70 minutes
- can be accelerated

## Delivery

- 350 g mix cartridge (A+B), SP 12 per carton: **Part No. 870 300**
- Stirrer for mix cartridge, SP 12 per carton: **Part No. 860 110**
- NOTE:
  1. Insert cartridge into gun and clamp in position with actuator (prevents movement of cartridge piston while mixing).
  2. Insert stirrer with the threaded end into the nozzle opening and screw in the cartridge separator disc in an clockwise direction till it clicks.
  3. Using an "air pump action" move stirrer forwards and backwards vigorously till the mixture has a uniform colour.
  4. Draw stirrer upwards to the stop and screw out. Screw on the standard cartridge nozzle and process completely.
- 540 g tandem cartridge (A+B), SP 12 per carton: **Part No. 870 320**
- Mixer nozzle for tandem cartridge individual pack: **Part No. 870 710**
- NOTE: when working with the tandem cartridge, please note the remarks under "Working tools". Mixing nozzles must be ordered at the same time. The advantages of tandem working are that ejection and mixing take place in the same operation and that A+B only react together after the mixing nozzle and as a result the cartridge can be reused at a later time with a new mixing nozzle.
- 5 kg tin component A-Körapur 840: **Part No. 870 350**
- 1 kg tin component B-GETO PUR B10 (hardener): **Part No. 870 010**
- Larger pack on request, available on short delivery
- GETO PUR Cleaner 2, 1000 ml tin: **Part No. 850 192**
- Metal primer Körapox BS 85, 5 litre pack (A+B): **Part No. 830 132**
- Körabond metal primer HG 79, 500 g pack: **Part No. 870 825 000**
- Köracur PU accelerator, 50 g pack: **Part No. 870 830 000**



81.02.20.2  
Sealants and adhesives  
2-part polyurethane  
**Körapur 840**

**Tools required**

- Stirrer (mixer): **Part No. 840 094**
- Cartridge guns GETO hand and air tools
- Hand pressure tandem gun: **Part No. 845 110**
- Compressed air tandem gun: **Part No. 845 111**

**Preparation and working**

Surfaces must be clean, dry, dust and grease free.\*

In general, metals must be pre-treated, abrade if necessary. The primer improves the ageing behaviour of the adhesion bond as well as the hydrolytic resistance.

Using a mixing machine (approx. 400 r.p.m.) thoroughly mix A and B components together till the mixture has a uniform colour. Re-pot if necessary.

Spread the mixture evenly over the surfaces to be bonded using a spreader and then bring the surfaces together. The spreading thickness is dependent upon the characteristics of the surfaces being joined. The joint can be lightly loaded after 6 – 8 hours. Final curing is achieved between 18 and 24 hours. Higher temperatures shorten the setting time; lower temperatures extend this time.

Clean tools immediately after use. Hardened materials can only be removed mechanically.

Avoid skin contact when working with the un-bonded materials; wear protective gloves.

Read the "Data Sheet on Working with PUR Spreadable Materials" of the main association of Commercial Cooperatives, Central Office for Accident Prevention.

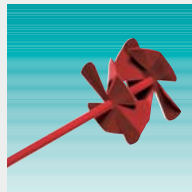
**Material Specifications**

Base	polyurethane, two-component, solvent free
Colour	beige
Density	1.55 g/cm <sup>3</sup> (resin)
	1.23 g/cm <sup>3</sup> (hardener)
	1.45 g/cm <sup>3</sup> (mixture)
Viscosity	structurally viscous (resin)
	200 mPas (hardener)
	40.000 mPas (mixture)
Mixing ratio	resin to hardener 5:1 by weight
Pot time	approx. 45 min
Open time	approx. 60 – 70 min
Initial adhesion	approx.. 6 – 8 hrs at 20 °C
Shear strength Alu/Alu	24 N/mm <sup>2</sup> at -20 °C
	16 N/mm <sup>2</sup> at 20 °C
	4.4 N/mm <sup>2</sup> at 80 °C
Tensile strength	32 N/mm <sup>2</sup> at -20 °C
	12 N/mm <sup>2</sup> at 20 °C
Extension breaking strain	15% at -20 °C
	70% at 20° C
Shore D hardness	45
Working temperature	+15 °C to +25 °C
Temperature stability	-30 °C to +120 °C/short term to +150 °C
Min. storage temperature	10 °C
Shelf life	12 months

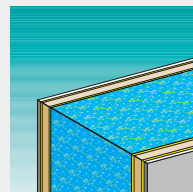
\* for preparation of grounds, see our pre-treatment tables:  
adhesion with Körapur 2-component and GETO PUR 2-component adhesives

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Stirrer (mixer)



Sandwich board production



2-component PU adhesive

**Brief description****Description****Self-levelling sandwich sheet adhesive**

Solvent free, two component, reaction adhesive for manufacture of sandwich components in freezer vehicle, caravan, container and vehicle construction. For jointing hard PVC, GFK, steel, aluminium onto PUR, PVC, PS hard foam. Rapid, uniform curing.

**Körapur 648 is low viscosity (self-levelling) with a long pot time.**

**Features**

- very rapid and easy working due to self-levelling characteristic
- very good adhesion
- rapid, uniform curing
- tough with very high strength
- long pot time: 120 minutes/long open time: 180 minutes

**Delivery**

- 30 kg pail component A-Körapur 648: **Part No. 870 400**
- 1 kg tin component B-GETO PUR B10 (hardener): **Part No. 870 010**
- 10 kg tin component B-Körapur TH 650 (hardener): **Part No. 870 620**
- Larger pack on request, available on short delivery
- GETO PUR Cleaner 2, 1000 ml tin: **Part No. 850 192**
- Metal primer Körapox BS 85, 5 litre pack (A+B): **Part No. 830 132**

**Tools required**

- Stirrer (mixer): **Part No. 840 094**

**Preparation and working**

In general, metals must be pre-treated, abrade if necessary. Pre-treatment with Körapox BS 85 (two-component) can also be carried out.

The primer improves the ageing behaviour of the adhesion bond as well as the hydrolytic resistance. Jointing surfaces of GFK must also be keyed if necessary.

Using a mixing machine (ca. 400 r.p.m.) thoroughly mix resin and hardener together till the mixture has a uniform colour. Re-pot if necessary.

Spread the adhesive evenly on the surfaces to be stuck using a spatula, spreader or roller then bring the surfaces together. The layer thickness is dependent upon the characteristics of the surfaces being joined. With Körapur 648 the joint can be lightly loaded after 12-16 hours at a room temperature of 20 °C.

Final curing is achieved after approx. 48 hours. Higher temperatures shorten the setting time; lower temperatures extend this time.

Clean tools immediately after use. Hardened materials can only be removed mechanically.

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81.02.21.2  
Sealants and adhesives  
2-part polyurethane  
**Körapur 648**

**Preparation and working**  
(cont.)

When working with Körapur 648, avoid direct skin contact with uncured adhesive; wear protective gloves.

If warmed or sprayed, harmful vapours can build up.

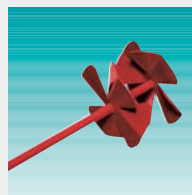
Read the data sheets of the Association of Commercial Cooperatives.

**Material Specifications**

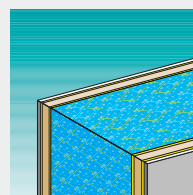
Base	polyurethane, two-component, solvent free
Colour	beige
Density (kg/l)	approx. 1.49 (resin)
	approx. 1.23 (hardener)
	approx. 1.42 (mixture)
Viscosity (mPas)	approx. 5200 (resin)
	approx. 130 (hardener)
	approx. 1400 (mixture)
Mixing ratio	3.5:1 by weight
Pot time at 20 °C	approx. 120 min
Open time	approx. 180 min
Initial adhesion	approx. 12 - 16 hrs
Shear strength Alu./Alu.	approx. 13 N/mm <sup>2</sup> at 20 °C
	approx. 3 N/mm <sup>2</sup> at 80 °C
Working temperature	+15 °C to +25 °C
Temperature stability	-30 °C to +120 °C/short term to +150 °C
Min. storage temperature	10 °C
Shelf life	12 months

*\* for preparation of grounds, see our pre-treatment tables:  
jointing with Körapur 2-component and GETO PUR 2-component adhesives*

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Stirrer (mixer)



Sandwich board production



2-component PU adhesive

**Brief description****Description****Medium viscosity sandwich sheet adhesive**

Solvent free, two component, reaction adhesive for manufacture of sandwich components in freezer vehicle, caravan, container and vehicle construction. For jointing hard PVC, GFK, steel, aluminium onto PUR, PVC, PS hard foam. Rapid, uniform curing. Körapur 672 is medium viscosity with a normal pot time.

**Features**

- rapid and easy working
- very good adhesion
- rapid, uniform curing
- tough, with very high strength
- pot time: 60 minutes/open time: 100 minutes
- relatively resistant to timber moisture

**Delivery**

- 30 kg pail component A-Körapur 672: **Part No. 870 500**
- 1 kg tin component B-GETO PUR B10 (hardener): **Part No. 870 010**
- 10 kg container tin B-Köracur TH 650 (hardener): **Part No. 870 620**
- Larger pack on request, available on short delivery
- GETO PUR Cleaner 2, 1000 ml tin: **Part No. 850 192**
- Metal primer Körapox BS 85, 5 litre pack (A+B): **Part No. 830 132**

**Tools required**

- Stirrer (mixer): **Part No. 840 094**

**Preparation and working**

Surfaces must be clean, dry, and grease free.

In general, metals must be pre-treated, abrade if necessary. Pre-treatment with Körapox BS 85 (two-component) can also be carried out. The primer improves the ageing behaviour of the adhesion bond as well as the hydrolytic resistance.

GFK bonding surfaces must also be keyed if required.

Using a mixing machine (approx. 400 r.p.m.) thoroughly mix resin and hardener together till the mixture has a uniform colour. Re-pot if necessary.

Spread the adhesive evenly on the surfaces to be stuck using a spatula, spreader or roller then bring the surfaces together. The layer thickness is dependent upon the characteristics of the surfaces being joined. With Körapur 672 the joint can be lightly loaded after 8-12 hours at a room temperature of 20 °C.

Final curing is achieved after approx. 24 hours. Higher temperatures shorten the setting time; lower temperatures extend this time.

Clean tools immediately after use. Hardened materials can only be removed mechanically.

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## 81.02.22.2

### Sealants and adhesives

### 2-part polyurethane

## Körapur 672

#### Preparation and working (cont.)

When working with Körapur 672, avoid direct skin contact with exposed adhesive; wear protective gloves.

If warmed or sprayed, harmful vapours can form.

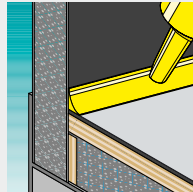
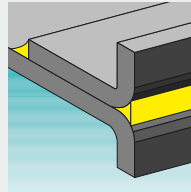
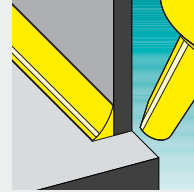
Read the data sheets of the Association of Commercial Cooperatives.

#### Material Specifications

Base	polyurethane, two-component, solvent free
Colour	beige
Density (kg/l)	approx. 1.67 (resin)
	approx. 1.23 (hardener)
	approx. 1.60 (mixture)
Viscosity (mPas)	approx. 25000 (resin)
	approx. 200 (hardener)
	approx. 8000 (mixture)
Mixing ratio	5:1 by weight
Pot time	approx. 60 min
Open time	approx. 100 min
Initial adhesion	approx. 8 hrs
Working temperature	+15 °C to +25 °C
Temperature stability	-30 °C to +120 °C/short term to +150 °C
Min. storage temperature	10 °C
Shelf life	12 months

*\* for preparation of grounds, see our pre-treatment tables:  
jointing with Körapur 2-component and GETO PUR 2-component adhesives*

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*Clean, secure, leak-proof**Seam, contact and jointing seal**Seals for paint preparations**GETO MSP 145*

## Brief description

### Description

Single component, elastic sealant/adhesive on MS polymer base which sets on reaction to air humidity. Solvent and isocyanide-free, smell neutral with excellent paint compatibility and UV stability. Many applications in metal and synthetic material working in industry and manual operations.

### Features

- Wet-in-wet and subsequent over painting
- Almost no volume shrinkage
- Does not form bubbles
- Free of solvents, isocyanides, PVC, silicon
- Smell neutral, no special labeling requirements
- Resistant to alcohol
- Good UV and ageing characteristics
- Elastic in the temperature range -30 °C to +100 °C
- For internal and external use
- Can be used as sealant and for lightly loaded adhesive applications
- For sealing or light gluing amongst a wide variety of materials
- Adhesion on most grounds without priming
- Elastic

### Special features

- Fungal resistant according to DIN ISO 849
- Harmless to food stuffs according to ISEGA
- Easily worked
- Short thread lengths
- Wet-in-wet and subsequent over painting , very good paint compatibility
- No bubble formation, negligible volume shrinkage
- For internal and external use
- Good UV and ageing characteristics

### Typical applications

- All sealing applications, which must be quickly painted over
- Exposed external seals
- Universally applicable for all seam and joint seals
- Sealing of all profiles and joints, especially in motor manufacture.

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**Paint compatibility**

GETO MSP 145 can be painted over wet-in-wet (after skin formation) with commercially available, industrial single and two component car repair spray paints; the curing time of the sealant/adhesive is only marginally reduced. Optimum paint adhesion is achieved when spraying is carried out within 72 hours of application. If carried out after this time, the sealant/adhesive must be lightly abraded in order to obtain good paint adhesion.

As a rule, best results are achieved with deck varnishes. EP foundations, 2-component fillers and acid primers, in comparison with deck varnishes, have only marginally inferior adhesion on GETO MSP 145.

From this it is recommended that the process should be initial priming, then sealing and finally deck varnishing. If a burnishing medium is to be employed, then care should be taken to clean or polish the surface before painting as residues of the burnishing process can reduce adhesion between bead and paint. The following 2-component primers and 2-component deck varnishes have been tested and documented on GETO MSP 145:

- Foundations/primers: "Autocolor Primecoat P565-625", "Autocolor reaction primer P565-767", "PPG Delfleet F392", "Standox reactive adhesion primer"
- Finishing paints: "Autocolor Turbo Plus P488", "Acyrl enamel varnish MSX 5-25", "Standocryl MSX 5-25"

It is important to carry out individual trials beforehand.

It should be noted that, as a rule, paint systems are non-flexible and are inclined to crack on top of the elastic sealant/adhesive material. As GETO MSP has almost no volume shrinkage, paint is less inclined to shrinkage and therefore less liable to cracking or chipping. Depending upon usage, sealants/adhesives with a high Shore A hardness, which reduce paint cracking even more as a consequence of their greater stiffness, can be recommended.

**Delivery**

Colour	Cartridge 290 ml (SP 12)
white	<b>850 475</b>
gray	<b>850 476</b>
black	<b>850 477</b>

GETO MSP Cleaner 1, 1000 ml tin: **Part No. 850 496**

GETO MSP Cleaner 2, 500 ml tin: **Part No. 850 497**

**Processing notes**

Work with commercially available hand or compressed air guns, e.g. with the quality TITGEMEYER products "GETO Handtool" and "GETO Airtool" in the temperature range +5 °C and +35 °C. Note the points regarding "Paint compatibility". For compressed air working, pressures of 2 to 6 bar are required. Lower material temperatures lead to increases in viscosity, higher temperatures mean lower viscosities.

Depending upon the range of ambient temperatures and humidity, the sealing seam must be smoothed out within the skin forming time.

**Surface preparation**

GETO MSP adheres well to many metals, synthetic materials and woods without the need for special pre-treatment, such as primers. This refers especially to aluminum, stainless steel, untreated/galvanized/painted steel, copper, brass, glass, hard PVC, PC, GfK, timber.

Surfaces must be thoroughly cleaned and free of grease; for this, depending upon surface, we recommend GETO MSP Cleaner 1, which improves adhesion of the sealant/adhesive.

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For special surfaces, e.g. powder spray coatings or ABS and for instances where large thermal and moisture stresses are anticipated, we recommend GETO MSP Cleaner 2. Application by cloth, flash-off time: 10 minutes.  
As a rule, it is recommended that the surfaces be finely abraded with an abrasive paper. Condensation can form if the surface is too cold, and the temperature falls below the dew point. This can be avoided by allowing the surface to warm up.  
Before use, it is essential to read the Pre-treatment Tables for GETO MSP products and the Technical Data Sheets for GETO MSP Cleaner 1 and GETO MSP Cleaner 2.  
It is important to carry out trials beforehand.

## Storage, transport, safety regulations

Product is not susceptible to frost.  
Store in dry conditions, in original packing between +5 °C and +30 °C.  
Transport class is not defined.  
No special safety precautions are required; note details in Safety Data Sheet.

## Material Specifications

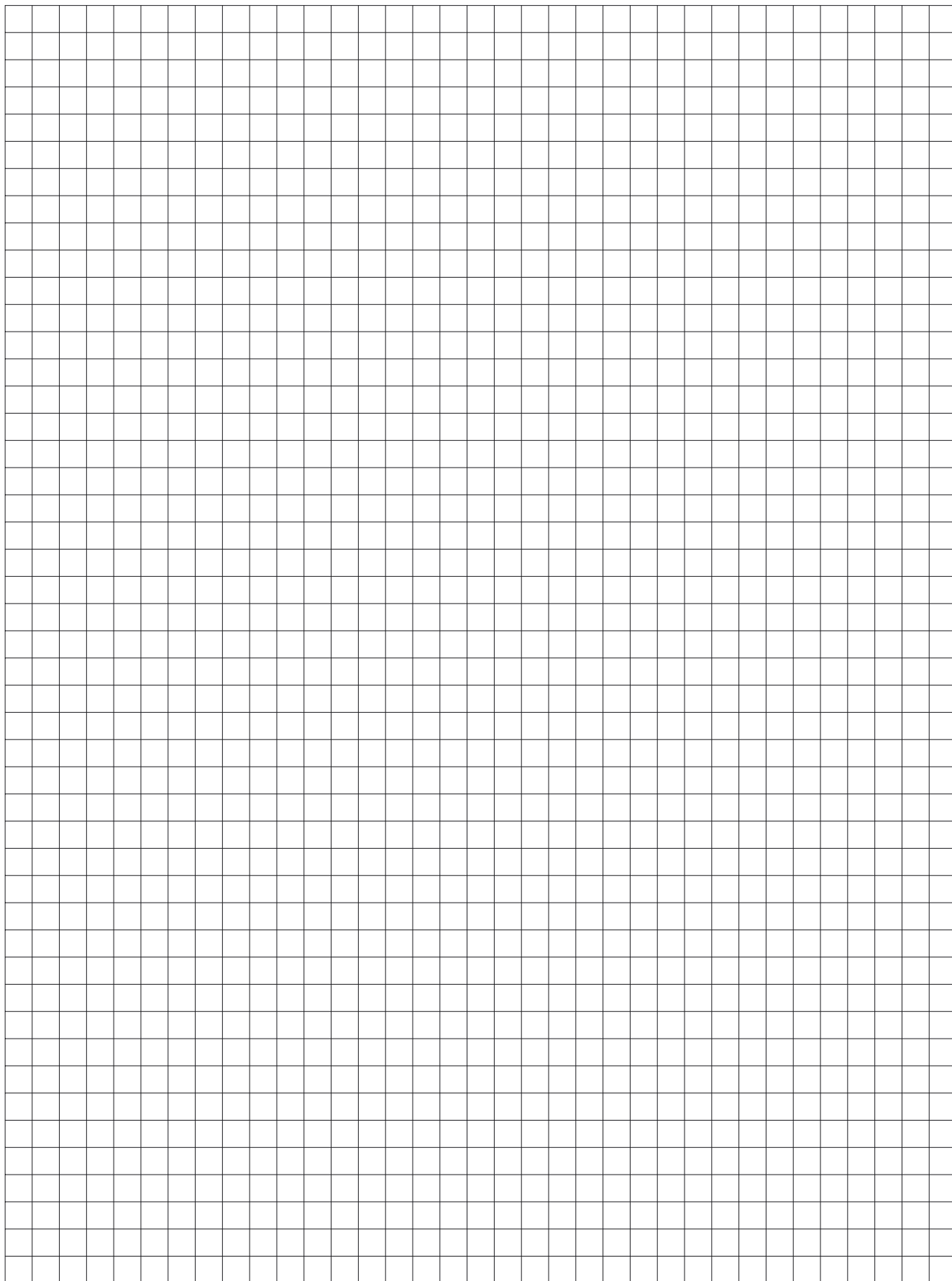
Base	siloxane modified polymers
Colours	white, gray, black
Curing agent	air humidity
Density	1.45 g/ml
Viscosity	mid-range
Thread forming	short
Volume change DIN 52451	< 2%
Skin forming time*	approx. 15 min
Rate of hardening 24 hrs*	approx. 2 mm
Tensile strength DIN 53504	2.5 N/mm <sup>2</sup>
Extension 100% extension**	1.7 N/mm <sup>2</sup>
Shear strength DIN 53283	1.6 N/mm <sup>2</sup>
Breaking strain DIN 53504	250%
Shore A hardness DIN 53505	50
UV and weathering resistance	exceptional
Temperature stability	-30 °C to +100 °C
Working temperature	+5 °C to +35 °C
Storage temperature	+5 °C to +30 °C, dry
Shelf life	12 months, unopened in original packing

\* measured at 20 °C ambient temperature and 50 % relative humidity

\*\* DIN 53504

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81.03.10.4  
Sealants and adhesives  
1-part MS polymers  
**GETO®** MSP 145



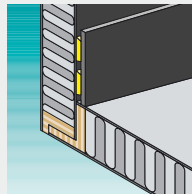




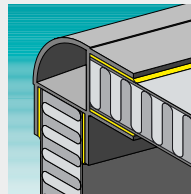
Easy working



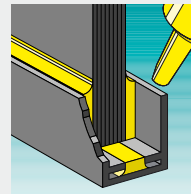
High adhesion



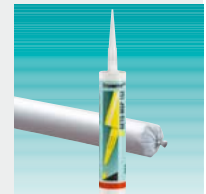
Bonding of strips



Rapid initial adhesion



Bonding of profiles



GETO MSP 152

## Brief description

### Description

### Low viscosity constructional adhesive

Single component, elastic adhesive/sealant on MS polymer base which sets on reaction to air humidity. Solvent and isocyanide-free, smell neutral with excellent adhesion on many metals and synthetic materials. Multiple applications in metal and synthetic material working in industry and manual operations.

### Features

- Adhesion on most grounds without priming
- Wet-in-wet and subsequent over painting
- Almost no volume shrinkage
- Does not form bubbles
- Free of solvents, isocyanides, PVC, silicon
- Smell neutral, no special labeling requirements
- Resistant to alcohol and solvents
- UV stable, no ageing
- Elastic in the temperature range -40 °C to +120 °C
- For internal and external use
- Can be used as adhesive or sealant
- For gluing or sealing between many types of material

### Special features

- Easily worked, simple application
- Simple pressing together of jointing materials, good flow characteristics
- Rapid initial adhesion
- High final adhesion

### Typical applications

- Gluing/sealing of frame profiles to sandwich boards.
- Gluing/sealing of base boards in goods containers
- Gluing/sealing of various roof constructions in vehicle construction, busses, trains
- Gluing/sealing of all types of sun roof systems
- Gluing/sealing where over-painting increases tendency to tearing

### Surface preparation

GETO MSP adheres well to many metals, synthetic materials and woods without the need for special pre-treatment, such as primers. This refers especially to aluminum, stainless steel, untreated/galvanized/painted steel, copper, brass, glass, hard PVC, PC, GfK, timber. Surfaces must be thoroughly cleaned and free of grease; for this, depending upon surface, we recommend GETO MSP Cleaner 1, which improves adhesion of the sealant/adhesive. For special surfaces, e.g. powder spray coatings or ABS and for instances where large thermal and moisture stresses are anticipated, we recommend GETO MSP Cleaner 2. Application by cloth, drying time: 10 minutes.

As a rule, it is recommended that the surfaces be finely abraded with an abrasive paper. Condensation can form if the surface is too cold and the temperature falls below the dew point. This can be avoided by allowing the surface to warm up.

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# 81.03.11.2

## Sealants and adhesives

### 1-part MS polymers

#### GETO® MSP 152

#### Surface preparation (cont.)

Before working with the product it is essential to read the Pre-treatment Tables for GETO MSP products and the Technical Data Sheets for GETO MSP Cleaner 1 and GETO MSP Cleaner 2. It is important to carry out trials beforehand.

#### Delivery

Colour	Cartridge 290 ml (SP 12)	Pouch 600 ml (SP 20)
white	<b>850 465</b>	<b>850 460</b>
gray	<b>850 466</b>	<b>850 461</b>
black	<b>850 467</b>	<b>850 462</b>

GETO MSP Cleaner 1, 1000 ml tin: **Part No. 850 496**

GETO MSP Cleaner 2, 500 ml tin: **Part No. 850 497**

#### Processing notes

Work with commercially available hand or compressed air guns, e.g. with the quality TITGEMEYER tools "GETO Handtool" and "GETO Airtool" in the temperature range +5 °C and +35 °C. Note the points regarding "Surface Preparation". For compressed air working, pressures of 2 to 6 bar are required. Lower material temperatures lead to increases in viscosity, higher temperatures mean lower viscosities.

#### Sealing

Depending upon the range of ambient temperature and humidity, the sealing seam must be smoothed out within the skin forming time.

#### Gluing

Depending upon materials, application should be as a round bead or as a triangular bead in individual dimensions. The triangular bead has the advantage that this bead form facilitates uniform distribution of the adhesive with the subsequent joining of the pieces and also has the ability to bridge greater tolerances. The greater the thickness of the adhesive, the more distortion can be accommodated by the elasticity of the adhesive. For this reason, the adhesive layer thickness must be determined by the application/purpose. Layer thicknesses must be between a minimum of 1mm and a maximum of 5 mm. To maintain more exact layer thicknesses and consequential better fixing (easier handling), we recommend the additional use of double-sided adhesive tape or the "GETO Fixpoints" (individual adhesive points). The bodies to be fixed must be brought together after application of the adhesive within the open time. As the setting time of the single component adhesive/sealant is proportional to the ambient temperature and relative humidity, then the higher both are the shorter will be the setting time and also the shorter will be the shuffling time. For these reasons and dependent upon the application, the adhesive joints in the initial phase of hardening should be mechanically fixed. Increasing the humidity of the surrounding air with a light water spray from an atomizer is recommended in order to accelerate the curing time.

#### Paint compatibility

GETO MSP 152 can be painted over wet-in-wet (after skin formation) with commercially available, industrial single and two component car repair spray paints; the curing time of the adhesive/sealant is only marginally reduced. Optimum paint adhesion is achieved when spraying is carried out within 72 hours of application of the adhesive/sealant. If carried out after this time, the adhesive/sealant must be lightly abraded in order to obtain good paint adhesion.

As a rule, best results are achieved with deck varnishes. EP primers, 2-component fillers and acid primers have slightly inferior adhesion in comparison to deck varnishes on GETO MSP 152. From this it is recommended that the process should be initial priming, then sealing followed by a coating with deck varnish. If a burnishing medium is to be employed, then care

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should be taken to clean or polish the surface before painting as residues of the burnishing process can reduce adhesion between bead and paint.

The following 2-component primers and 2-component deck varnishes have been tested and documented on GETO MSP 152:

- Foundations/primers: "Autocolor Primecoat P565-625", "Autocolor reaction primer P565-767", "PPG Delfleet F392", "Standox reactive adhesion primer"
- Finishing paints: "Autocolor Turbo Plus P488", "Acyrl enamel paint MSX 5-25", "Standocryl MSX 5-25"

It is important to carry out individual trials beforehand.

It should be noted that, as a rule, paint systems are non-flexible and are inclined to crack on top of the elastic adhesive/sealant material. As GETO MSP 152 has almost no volume shrinkage, paint is less inclined to shrinkage and therefore less liable to cracking or chipping. Depending upon usage, adhesives/sealants with a high Shore A hardness, which reduce paint cracking even more as a consequence of their greater stiffness, can be recommended.

#### **Storage, transport, safety regulations**

Product is not susceptible to frost.

Store in dry conditions, in original packing between +5 °C and +30 °C.

Transport class is not defined.

No special safety precautions are required; note details in Safety Data Sheet.

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81.03.11.4  
Sealants and adhesives  
1-part MS polymers  
**GETO® MSP 152**

**Material Specifications**

Base	siloxane modified polymers
Colours	white, gray, black
Curing agent	air humidity
Density	1.4 g/ml
Viscosity	mid-range
Thread forming	long
Wet adhesion	low
Volume change DIN 52451	< 3%
Skin forming time*	approx. 10 min
Open time*	approx. 15 min
Rate of hardening 24 hrs*	approx. 3 mm
Tensile strength DIN 53504	2.8 N/mm <sup>2</sup>
Extension 100% extension**	1.7 N/mm <sup>2</sup>
Modulus of elasticity (10%) DIN 53504	3,3 N/mm <sup>2</sup>
Shear strength DIN 53283	2.5 N/mm <sup>2</sup>
Tear strength DIN 53515	16 N/mm <sup>2</sup>
Breaking strain DIN 53504	250%
Shore A hardness DIN 53505	55
UV and weathering resistance	exceptional
Temperature stability	-40 °C to +120 °C/max. 0.5 h to +180 °C
Working temperature	+5 °C to +35 °C
Storage temperature	+5 °C to +30 °C dry
Shelf life	12 months, unopened in original packing

\* measured at 20 °C ambient temperature and 50% relative humidity

\*\* DIN 53504

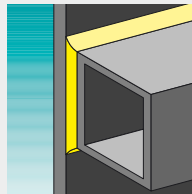
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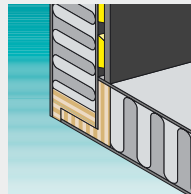
Roofing adhesive



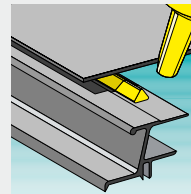
Strong wet adhesive strength



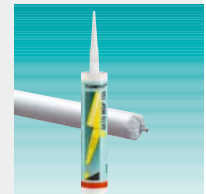
Bonding of sheet metal onto grid frames



Bonding strips



Roofing adhesive



GETO MSP 155

## Brief description

### Description

### High strength construction adhesive

Single component, elastic adhesive/sealant on MS polymer base which sets on reaction to air humidity. Solvent and isocyanide-free, smell neutral with excellent adhesion on many metals and synthetic materials. Many applications in metal and synthetic material working in industry and manual operations.

### Features

- Adhesion on most grounds without priming
- Wet-in-wet and subsequent over painting
- Almost no volume shrinkage
- Does not form bubbles
- Free of solvents, isocyanides, PVC, silicon
- Smell neutral, no special labelling requirements
- Resistant to alcohol and solvents
- UV stable, no ageing
- Elastic in the temperature range -40 °C to +120 °C
- For internal and external use
- Can be used as adhesive or sealant
- For gluing or sealing between many types of material

### Special features

- High static adhesion
- High wet strength
- Short thread lengths
- Rapid initial settling
- High final adhesion

### Typical applications

- Gluing/sealing of side-by-side sheets on grid frame constructions
- Gluing/sealing of roof valleys, e.g. GFK or aluminium, on roof frames
- Gluing/sealing of various roof constructions in vehicle construction, busses, trains
- Gluing/sealing of all types of sun roof systems
- Gluing/sealing where over-painting increases tendency to tearing

### Surface preparation

GETO MSP adheres well to many metals, synthetic materials and woods without the need for special pre-treatment, such as primers. This refers especially to aluminium, stainless steel, untreated/galvanized/painted steel, copper, brass, glass, hard PVC, PC, GfK, timber. Surfaces must be thoroughly cleaned and free of grease; for this, depending upon surface, we recommend GETO MSP Cleaner 1, which improves adhesion of the sealant/adhesive. For special surfaces, e.g. powder spray coatings or ABS and for instances where large

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81.03.12.2  
Sealants and adhesives  
1-part MS polymers  
**GETO® MSP 155**

**Surface preparation**  
(cont.)

thermal and moisture stresses are anticipated, we recommend GETO MSP Cleaner 2.  
Application by cloth, drying time: 10 minutes.  
As a rule, it is recommended that the surfaces be finely abraded with an abrasive paper.  
Condensation can form if the surface is too cold, and the temperature falls below the dew point. This can be avoided by allowing the surface to warm up. Before use, it is essential to read the Pre-treatment Tables for GETO MSP products and the Technical Data Sheets for GETO MSP Cleaner 1 and GETO MSP Cleaner 2.  
It is important to carry out trials beforehand.

**Delivery**

Colour	Cartridge 290 ml (SP 12)	Pouch 600 ml (SP 20)
white	<b>850 400</b>	<b>850 410</b>
grey	<b>850 401</b>	<b>850 411</b>
black	<b>850 402</b>	<b>850 412</b>

GETO MSP Cleaner 1, 1000 ml tin: **Part No. 850 496**  
GETO MSP Cleaner 2, 500 ml tin: **Part No. 850 497**

**Processing notes**

Work with commercially available hand or compressed air guns, e.g. with the quality TITGEMEYER tools "GETO Hand tool" and "GETO Airtool" in the temperature range +5 °C and +35 °C. Note the points regarding "Surface Preparation". For compressed air working, pressures of 2 to 6 bar are required. Lower material temperatures lead to increases in viscosity, higher temperatures mean lower viscosities.

**Sealing**

Depending upon the range of ambient temperatures and humidity, the sealing seam must be smoothed out within the skin forming time.

**Gluing**

Depending upon materials, application should be as a round bead or as a triangular bead in individual dimensions. The triangular bead has the advantage that this bead form facilitates uniform distribution of the adhesive with the subsequent joining of the pieces and also has the ability to bridge greater tolerances. The greater the thickness of the adhesive, the more distortion can be accommodated by the elasticity of the adhesive. For this reason, the adhesive layer thickness must be determined by the application/purpose. Layer thicknesses must be between a minimum of 1mm and a maximum of 5 mm. To maintain more exact layer thicknesses and consequential better fixing (easier handling), we recommend the additional use of double-sided adhesive tape or the "GETO MSP Fixpoints" (individual adhesive points). The bodies to be fixed must be brought together after application of the adhesive within the open time. As the setting time of the single component adhesive/sealant is proportional to the ambient temperature and relative humidity, then the higher both are the shorter will be the setting time and also the shorter will be the shuffling time. For these reasons and dependent upon the application, the adhesive joints in the initial phase of hardening should be mechanically fixed. Increasing the humidity of the surrounding air with a light water spray from an atomizer is recommended in order to accelerate the curing time.

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### Paint compatibility

After a skin has formed, GETO MSP 155 can be painted over with commercially available, industrial single and double component car repair spray paint; curing times of the adhesive/sealant are only marginally reduced. Optimum paint adhesion is achieved when spraying is carried out within 120 hours of application of the adhesive/sealant. If carried out after this time, the adhesive/sealant must be lightly abraded in order to obtain good paint adhesion. As a rule, best results are achieved with deck varnishes.

EP primers, 2-component fillers and acid primer have slightly inferior adhesion in comparison to deck varnishes on GETO MSP 155. From this it is recommended that the process should be initial priming, then sealing followed by a coating with deck varnish. If a burnishing medium is to be employed, then care should be taken to clean or polish the surface before painting as residues of the burnishing process can reduce adhesion between bead and paint.

The following 2-component primers and 2-component deck varnishes have been tested and documented on GETO MSP 155:

- Foundations/primers: "Autocolor Primecoat P565-625", "Autocolor reaction primer P565-767", "PPG Delfleet F392", "Standox reactive adhesion primer"
- Finishing paints: "Autocolor Turbo Plus P488", "Acyrl enamel varnish MSX 5-25", "Standocryl MSX 5-25"

It is important to carry out trials beforehand.

It should be noted that, as a rule, paint systems are non-flexible and are inclined to crack on top of the elastic adhesive / sealant material. As GETO MSP 155 has almost no volume shrinkage, paint is less inclined to shrinkage and therefore less liable to cracking or chipping. Depending upon usage, adhesives/sealants with a high Shore A hardness, which reduce paint cracking even more as a consequence of their greater stiffness, can be recommended.

### Storage, transport, safety regulations

Product is not susceptible to frost.

Store in dry conditions, in original packing between +5 °C and +30 °C.

Transport class is not defined.

No special safety precautions are required; note details in Safety Data Sheet.

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81.03.12.4  
Sealants and adhesives  
1-part MS polymers  
**GETO® MSP 155**

**Material Specifications**

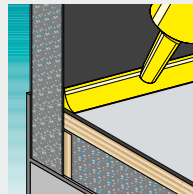
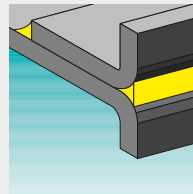
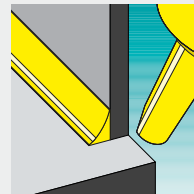
Base	siloxane modified polymers
Colours	white, grey, black
Curing agent	air humidity
Density	1.4 g/ml
Viscosity	high
Thread forming	short
Wet adhesion	high
Volume change DIN 52451	< 4%
Skin forming time*	approx. 12 min
Open time*	approx. 15 min
Rate of hardening 24 hrs*	approx. 4 mm
Tensile strength DIN 53504	3.5 N/mm <sup>2</sup>
Extension 100% extension**	1.9 N/mm <sup>2</sup>
Shear strength DIN 53283	2.4 N/mm <sup>2</sup>
Tear strength DIN 53515	16 N/mm <sup>2</sup>
Breaking strain DIN 53504	250%
Shore A hardness DIN 53505	58
UV and weathering resistance	exceptional
Temperature stability	-40 °C to +120 °C/max. 0.5 h to 180 °C
Working temperature	+5 °C to +35 °C
Storage temperature	+5 °C to +30 °C dry
Shelf life	12 months, unopened in original packing

\* measured at 20 °C ambient temperature and 50 % relative humidity

\*\* DIN 53504

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*Clean, secure, leak-proof**External and internal  
sealing**Seam, contact and jointing  
seal**GETO MSP 180*

## Brief description

### Description

### Transparent universal adhesive

Single component, elastic adhesive/sealant on MS polymer base which sets on reaction to air humidity. Solvent and isocyanide-free, smell neutral with excellent adhesion on many metals and synthetic materials. Many applications in metal and synthetic material working in industry and manual operations.

### Features

- Adhesion on most grounds without priming
- Almost no volume shrinkage
- Does not form bubbles
- Free of solvents, isocyanides, PVC, silicon
- Smell neutral, no special labelling requirements
- Resistant to alcohol and solvents
- UV stable, no ageing
- Elastic in the temperature range -40 °C to +90 °C
- For internal and external use
- Cannot be painted over

### Typical applications

- Exposed external seals
- All sealing applications, which do not require over painting
- Sealing of all profiles and joints, especially in industry, motor manufacture, etc.

### Surface preparation

GETO MSP adheres well to many metals, synthetic materials and woods without the need for special pre-treatment, such as primers. This refers especially to aluminium, stainless steel, untreated/galvanized/painted steel, copper, brass, glass, hard PVC, PC, GfK, timber. Surfaces must be thoroughly cleaned and free of grease; for this, depending upon surface, we recommend GETO MSP Cleaner 1, which improves adhesion of the sealant/adhesive. For special surfaces, e.g. powder spray coatings or ABS and for instances where large thermal and moisture stresses are anticipated, we recommend GETO MSP Cleaner 2. Application by cloth, drying time: 10 minutes. As a rule, it is recommended that the surfaces be finely abraded with an abrasive paper. Condensation can form if the surface is too cold, and the temperature falls below the dew point. This can be avoided by allowing the surface to warm up. Before use, it is essential to read the Pre-treatment Table for GETO MSP products and the Technical Data Sheets for GETO MSP Cleaner 1 and GETO MSP Cleaner 2. It is important to carry out individual trials beforehand.

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81.03.13.2  
Sealants and adhesives  
1-part MS polymers  
**GETO® MSP 180**

**Delivery**

Cartridge 290 ml (SP 12) transparent: **Part No. 850 480**  
GETO MSP Cleaner 1, 1000 ml tin: **Part No. 850 496**  
GETO MSP Cleaner 2, 500 ml tin: **Part No. 850 497**

**Processing notes**

Work with commercially available hand or compressed air guns, e.g. with the quality TITGEMEYER tools "GETO Handtool" or "GETO Airtool" in the temperature range +5 °C and +35 °C. Note the points regarding "Surface Preparation". For compressed air working, pressures of 2 to 6 bar are required. Lower material temperatures lead to increases in viscosity, higher temperatures mean lower viscosities.  
Depending upon the range of ambient temperatures and humidity, the sealing seam must be smoothed out within the skin forming time.

**Paint compatibility**

**GETO® MSP 180 cannot be painted over** in contrast with the collared MSP products!

**Storage, transport,  
safety regulations**

Product is not susceptible to frost.  
Store in dry conditions, in original packing between +5 °C and +30 °C.  
Transport class is not defined.  
No special safety precautions are required; note details in Safety Data Sheet.

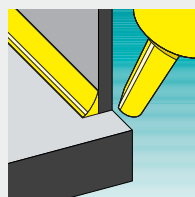
**Material Specifications**

Base	siloxane modified polymers
Colour	transparent
Curing agent	air humidity
Density	1.1 g/ml
Viscosity	high
Thread forming	short
Wet adhesion	mid-range
Volume change DIN 52451	< 3%
Skin forming time*	approx. 15 min
Open time*	approx. 20 min
Rate of hardening 24 hrs*	approx. 3 mm
Tensile strength DIN 53504	2.7 N/mm <sup>2</sup>
Extension 100% extension**	0.6 N/mm <sup>2</sup>
Shear strength DIN 53283	2.5 N/mm <sup>2</sup>
Breaking strain DIN 53504	500%
Shore A hardness DIN 53505	45
UV and weathering resistance	exceptional
Temperature stability	-40 °C to +90 °C
Working temperature	+5 °C to +35 °C
Storage temperature	+5 °C to +30 °C, dry
Shelf life	12 months, unopened in original packing

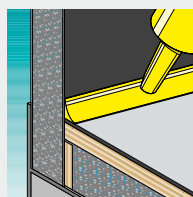
\* measured at 20 °C ambient temperature and 50% relative humidity

\*\* DIN 53504

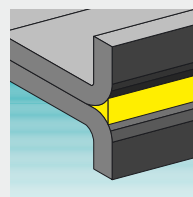
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Sealing



Clean, secure, leak-proof



Seam, contact and jointing seal



Sealant Ti Butyl

## Brief description

### Description

Sealant Ti Butyl is a single component, plastic-elastic sealant substance, which can be painted over.

When set, Sealant Ti Butyl has a malleable plastic consistency and as a result can accommodate relative movement of the sealed surfaces.

### Features

- easy working
- can be subsequently shaped (plastic-elastic)
- easily disassembled

### Applications

For joint sealing and bedding-in operations in, for example:

- automobile construction
- metalwork
- bodywork and vehicle construction
- caravan construction

### Delivery

Colour	Cartridge 310 ml (SP 12 per carton)
grey	812 110

### Suitable surfaces

The surface must be firm, dry and clean. Good adhesion on untreated, degreased, bonded primed and sprayed bodywork.

### Material Specifications

Chemical base	Synthetic rubber, solvent
Colour	grey
Solids content	approx. 80%
Consistency	semi-rigid
Viscosity (20 °C)	approx. 800000 m Pas (Epprecht Sys. V/20 r.p.m.)
Density (20 °C)	1.7 g/ml
Temperature range	after bonding -30 °C to +100 °C
Durability	against water, road salts and weathering effects
Usage	varies, depending upon sealing thickness
Shelf life	6 months
Danger classification VbF	A1, lightly inflammable
Dangerous Material classification of 28.08.86	identity plates not required

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## Sealant Ti Butyl

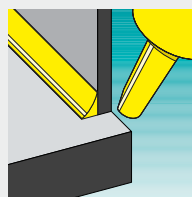
### Processing notes

The surface must be firm, dry and clean. Cut the cartridge point above the screw thread and screw on nozzle. Cut the spray nozzle opening at an angle and use suitable applicator tool. For working with compressed air, a pressure of approx. 2-3 bar is required. Fill joints and sealing surfaces well and make sure that air is not entrapped in bubbles. Visible joints can be smoothed out with a spatula or finger using normal household dishwasher detergent.

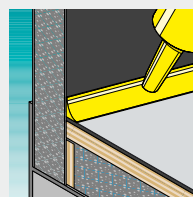
### Storage

Sealant Ti Butyl is frost proof. Storage temperature, however, should be between +15 and +25 °C. The pack should be protected against sunshine and warming. When stored in cool and dry conditions, the unopened pack can be stored for a minimum of 6 months.

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Sealant



Clean, secure, leak-proof



Dekaseal 8936

## Brief description

### Description

### Can be disassembled

Permanently sticky, non-hardening sealant for covered joints.

### Features

- permanently sticky
- self cleaning
- plasto-elastic

### Applications

For sealing overlaps, joints, seams, screw heads and other cover strips in mobile homes, car and container construction as well as between sheets, glass, GFK and other materials.

### Delivery

Colour	Cartridge 310 ml (SP 12 per carton)	Pouch 560 ml (SP 12 per carton)
Light grey	<b>812 114</b>	<b>812 115</b>

### Suitable surfaces

Surfaces must be dry, dust and grease free.

### Material Specifications

Chemical base	Butyl polymer, contains solvent
Colour	light grey
Consistency	thick, rigid paste
Viscosity	20 °C, 45-50 sec. (pressure outlet, nozzle 4 mm ø, 4 bar, 49 ml)
Density	20 °C approx. 1.42 g/ml
Solids content	approx. 88%
Ignition point	below +21 °C
Danger classification (VbF)	A I
Frost stability	given
Shelf life	6 months at 15 °C to 23 °C in original closed pack
Safety precautions	Slightly inflammable! Keep away from naked flames and sources of ignition.
Cleaning fluid	The substance is self-cleaning. For washing down use Dekalin VD 2 or benzene cleaner.
Curing time	approx. 5 hrs
Temperature range after bonding or curing	-20 to +80 °C

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81.04.20.2

Sealants and adhesives

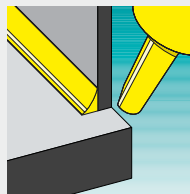
Butyls (sprayable)

**Dekaseal 8936**

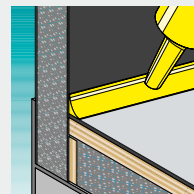
**Processing notes**

Press Dekaseal 8936 into joints, ridges, gaps, etc. and smooth out. Superfluous sealant can be simply removed by rubbing with itself.

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Sealing



Clean, secure, leak-proof



Bostik construction silicon

## Brief description

### Description

Permanently elastic, single component, universal sealant for the entire building sector as well as for metal and container construction.

- can be painted over -

### Features

- low smell
- can be over painted (with alkaloid resin based paints )
- very elastic
- high temperature stability (see Material Specifications)
- excellent stability against ageing, rotting, chemical attack
- for internal and external applications
- secure adhesion without primer

### Applications

- throughout entire building sector
- for joint sealing in sanitary installations between tiles and bath tubs, wash and shower basins
- for sealing glass in wooden window frames
- in metal and container construction
- for industry, handwork and DIY

### Delivery

Colour	Cartridge 300 ml (SP 20 per carton)	Pouch 600 ml (SP 20 per carton)
transparent	<b>816 450</b>	<b>816 451</b>
PVC white	<b>816 452</b>	<b>816 453</b>
grey	<b>816 454</b>	<b>816 455</b>
black	<b>816 456</b>	—
brown	<b>816 458</b>	<b>816 459</b>

Other colours on request.

### Suitable surfaces

The joint edges and adhesive surfaces must be sound, dry and free of dirt, dust, oil, grease and other foreign matter. Bostik building silicon sets without primer on a variety of materials, e.g. metals, glass, synthetic materials, etc. To improve adhesion, primer can be used. If necessary carry out individual trials. Will not adhere to oil or bitumen containing grounds, polyethylene, polypropylene or teflon. Bostik building silicon should not be used for sticking mirrors.

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**Material Specifications**

Base	silicon rubber, single component
Setting system	neutral
Rigidity (DIN 52454-ST-U26-70)	rigidity < 2 mm
Specific weight (DIN 52 451-PY)	transparent approx. 1.0 g/cm <sup>3</sup>
	coloured approx. 1.05 g/cm <sup>3</sup>
Skin forming time 23 °C/R.H. 50%	transparent approx. 15 min
	coloured approx. 15 min
Complete curing 23 °C/R.H. 50%	transparent approx. 5 mm/week
	coloured approx. 5 mm/week
Shore A hardness DIN 53 505 (4 weeks at 23 °C/R.H. 50%)	transparent approx. 18
	coloured approx. 30
Volume change (DIN 52 451-PY)	transparent approx. -6.5%
	coloured approx. -8.5%
Elasticity and stress values at 100% (DIN 52455-NWT-1-A2-100-23)	transparent approx. 0.36 N/mm <sup>2</sup>
	coloured approx. 0.39 N/mm <sup>2</sup>
Compressibility (DIN 52458-BR-1-V4)	approx. > 96%
Max. relative movement in practice	25%
Temperature stability	approx. -60 °C to +150 °C
Working temperature	+5 °C to +40 °C
Shelf life	12 months stored cool and dry

**Joint retro-filling**

For joints between 5-10 mm, the joint cross section should be square. Joint widths from 10-20 mm require a minimum depth of 10 mm. For joints greater than 20 mm, the joint depth should be half the joint width. Deeper joints should be pre-filled with a suitable foam filler.

**Cleaner**

Bostik Solvent 270 for material which has not set as well as for degreasing the adhesive surfaces. Cured silicon can be removed mechanically.

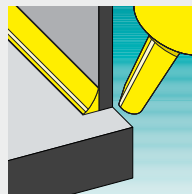
**Delivery**

1 l tin: **Part No. 830 422**

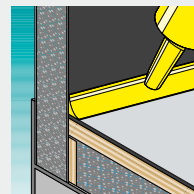
6 l tin: **Part No. 830 424**

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Sealing



Clean, secure, leak-proof



Bostik sanitary silicon

## Brief description

### Description

### Acetic interlinking silicon

Permanently elastic, anti-fungal (fungal inhibiting), single component sealant. Universally applicable for sealing butted and extension joints in construction, industrial and sanitary applications.

### Features

- universal application
- very elastic
- high temperature stability (see Material Specifications)
- excellent stability against ageing, rotting, chemical attack
- contains fungicide (fungal inhibiting)
- secure adhesion without primer
- for internal and external applications
- can not be painted over

### Applications

For butted and extension joints:

- between tiles and bath tubs, wash and shower basins
- in glass and metal construction: for aluminium, stainless steel, enamel, glass, timber, ceramics, synthetic materials
- for industry, handwork and DIY

### Delivery

Colour	Cartridge 300 ml (SP 20 per carton)	Pouch 600 ml (SP 20 per carton)
transparent	<b>816 443</b>	<b>816 433</b>
white	<b>816 440</b>	<b>816 430</b>
grey	<b>816 441</b>	<b>816 431</b>
black	<b>816 446</b>	—
brown	<b>816 444</b>	—

Other colours on request

### Suitable surfaces

The joint edges and adhesive surfaces must be sound, dry and free of dirt, dust, oil, grease and other foreign matter. Cover joint edges with self adhesive tape. Primer should be applied uniformly along the joint edges by brush and must be completely dry.

- a variety of synthetic materials • aluminium • stainless steel • enamel • glass • timber
- ceramics • tiles

### Unsuitable surfaces

- Oil or bitumen containing grounds • polyethylene • polypropylene • teflon.

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**Bostik sanitary silicon****Material Specifications**

Base	silicon rubber, single component
Setting system	Acetic acid
Rigidity (DIN 52454-ST-U26-23)	rigidity < 1 mm
Specific weight (DIN 52 451-PY)	approx. 1.00 g/cm <sup>3</sup>
Skin forming time	approx. 12 min (23 °C/R.H.50%)
Complete curing	approx. 7 mm/week (23 °C/R.H.50%)
Shore A hardness (DIN 53 505)	approx. 15 (4 weeks at 23 °C/R.H.50%)
Volume change (DIN 52 451-PY)	approx. -4.8%
Elasticity and stress values at 100% (DIN 52455-NWT-1-A2-100-23)	approx. 0.36 N/mm <sup>2</sup>
Compressibility (DIN 52458-BR-1-V4-)	approx. > 98%
Max. relative movement in practice	25%
Temperature stability	approx -60 °C to +150 °C
Working temperature	+5 °C to +40 °C
Shelf life	12 months stored cool and dry

**Joint retro-filling**

For joints between 5-10 mm, the joint cross section should be square. Joint widths from 10-20 mm require a minimum depth of 10 mm. For joints wider than 20 mm, the joint depth should be half the joint width. Deeper joints should be pre-filled with a suitable foam filler.

**Cleaner**

Bostik Solvent 270 for material which has not set as well as for degreasing the adhesive surfaces. Cured silicon can be removed mechanically.

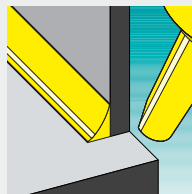
**Delivery**

1 l tin: **Part No. 830 422**

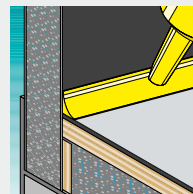
6 l tin: **Part No. 830 424**

**Note**

Because of the acidic curing system, a risk of corrosion exists for some metals (lead, zinc, iron). In individual cases, a different curing system should be used: Bostik construction silicon or appropriate anti-rust should be provided. The fungicide contained in Bostik sanitary silicon prevents the formation of mildew on the outer surface of the sealant. None of the latest technologies, however, have come up with a fungicide that is equally effective and permanent when dealing with all types of fungi. Mildew formation is accentuated by high air humidity, high temperatures and low light levels. An anti-mildew solution can be used to remove and prevent any formations.



Sealing and jointing



Clean, secure, leak-proof



Nibosil 3057 HT-  
high temperature silicon

## Brief description

### Description

### High temperature silicon

Special sealant for heating and ventilation applications. Nobosil 3057 is capable of withstanding temperatures up to +200 °C, will not rot and is light fast.

### Features

- specially for high temperature applications
- exceptional anti-rot and light fast characteristics
- very elastic
- for internal and external applications

### Applications

For butted and extension joints in high temperature applications in:

- heating installations
- ventilation installations:
- machine construction
- car industry
- general industrial applications
- handwork and DIY

### Delivery

Colour	Cartridge 300 ml (SP 20 per carton)
red	816 449

### Suitable surfaces

- metals
- synthetic materials

The joint edges and adhesive surfaces must be sound, dry and free of dirt, oil, grease and other foreign matter. Oil and grease residues must be removed. Suitable cleaning fluids are BOSTIK Solvent 250 or BOSTIK Solvent 270. Cover joint edges with self adhesive tape. For metals and galvanized sheeting, we recommend single component primer BOSTIK 5062. For copper and brass, painted and synthetic material surfaces as well as porous grounds, adhesion tests are necessary. Primer should be applied uniformly along the joint edges by brush and must be completely dry. At high relative humidities, condensation must be allowed for. In such cases, the joint edges must be dried with a warm air stream.

### Important

It is absolutely essential to identify the ground material. Please enquire as to the appropriate preparation procedures.

### Note

See reverse for Material Specifications.

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81.05.30.2

Sealants and adhesives

Silicons (acetate sys)

**Nibosil 3057 HT** (high temperature)

#### Material Specifications

Base	silicon rubber, single component
Setting system	Acetic acid
Rigidity (DIN 52454-ST-U26-23)	rigidity < 2 mm
Specific weight (DIN 52 451-PY)	approx. 1.3 g/cm <sup>3</sup>
Skin forming time	approx. 30 min (23 °C/R.H. 50%)
Complete curing	approx. 7 mm/week (23 °C/R.H. 50%)
Shore A hardness (DIN 53 505)	approx. 23 (4 weeks 23 °C/R.H. 50%)
Volume change (DIN 52 451-PY)	approx. -3%
Elasticity and stress values at 100% (DIN 52455-NWT-1-A2-100-23)	approx. 0.2 N/mm <sup>2</sup>
Max. relative movement in practice	approx. 20%
Temperature stability	approx. -50 °C to +200 °C
after vulcanisation	short term up to +250 °C
Working temperature	+5 °C to +60 °C (ground temperature)
Shelf life	6 months stored cool and dry

#### Joint retro-filling

For joints between 5-10 mm, the joint cross section should be square. Joint widths from 10-20 mm require a minimum depth of 10 mm. For joints wider than 20 mm, the joint depth should be half the joint width. Deeper joints should be pre-filled with a suitable foam filler.

#### Cleaner

Bostik Solvent 270 for degreasing the adhesive surfaces as well as for sealant, which has not set. Cured silicon can be removed mechanically.

#### Delivery

1 l tin: **Part No. 830 422**

6 l tin: **Part No. 830 424**

#### Note

For some metals, e.g. lead, iron, steel, copper, a risk of corrosion exists because of the effects of acid. Appropriate measures should be taken, e.g. the application of Bostik 5018 primer as corrosion protection.

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Plastigum special  
PVC adhesive

## Brief description

## Contact adhesive

### Description

Special solvent containing adhesive based on PU for soft and hard PVC. Resistant to ageing, relative movement in joined materials, colourless.

### Features

Substrates can be loosened as a result of the intensive adhesion. Chemical reaction.

### Applications

Particularly suitable for sticking cover strips for external and internal mitre joints, such as for example, PVC seals in hard and soft and foil combinations as well as hard/soft PVC, rubber, neoprene, leather edgings. Individual tests are recommended to test suitability. Applications in plastics industries and foil bonding.

### Delivery

Brush container approx. 170 g: **Part No. 820 002**

### Instructions for use

1. Shake well before use.
2. Surfaces must be clean, dry and free of grease.
3. Spread a thin layer of adhesive on both surfaces to be joined, bring together after a drying time of 3-5 minutes and press firmly together.

### Material Specifications

Chemical base	synthetic mastic, solvent, modifier
Colour	transparent
Specific weight	approx. 0.85 g/ml
Consistency	can be brushed on, max adhesion when completely set
Dry content	18%
Ignition point	-18 °C
Danger classification	A 1 GGVE/GGVS 3/5C
Frost resistance	Adhesive will freeze; can, however, be thawed out
Temperature stability	approx. 70 °C without hardener approx. 100 °C with 5-10% hardener H 13
Viscosity	approx. 4000 mPas Epprecht IV/13
Stability	waterproof after joining and curing
Joining time	approx. 5-6 hrs
Usage	depending upon ground and with two-sided application approx. 200-250 g/m <sup>2</sup>

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81.06.10.2

Sealants and adhesives

Contact adhesives

## **Plastigum**

### **Precautions**

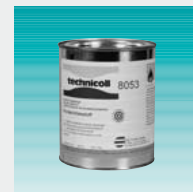
Plastigum causes irritation to eyes and breathing organs as well as to skin. Slightly flammable.

### **Safety note**

Must not be allowed to come into the hands of children. Keep container firmly closed and stored in a cool, well-ventilated location.

Do not expose to sources of ignition – do not smoke!

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technicoll 8053  
contact adhesive

**Brief description****Description****Contact adhesive**

Special solvent containing adhesive on polychloroprene base. technicoll 8035 is a rapid acting contact adhesive with a long open time. It is suitable also for matt, porous surfaces. Joints made with technicoll 8035 have good heat stability.

**Uses**

Preparation of synthetic material boards and plasticizer-free plastic sheeting on wood, chip-board or metal as well as a multi-purpose adhesive for a variety of materials such as metal, rubber, cork, cloths, leather, ceramic, glass and other materials.

**Preparation**

The joint surfaces must be clean, dry and free of grease and foreign material.  
Light keying of surfaces, e.g. with fine sand paper, generally improves adhesion.  
The adhesive must be thoroughly stirred before use.

**Application**

For contact joints, technicoll 8035 should be applied to both surfaces in thin uniform layers. Very coarse surfaces require a stronger application or, after drying of the first layer, a second application.

**Jointing**

After application, the solvent must be allowed to evaporate. This is dependent upon the layer thickness and on the room conditions and usually takes a few minutes. Correct time for jointing is reached when the adhesive layer does not form threads when probed with a finger but is clearly still tacky. The two surfaces must be exactly aligned and briefly pressed together. The strong, instantaneous bond facilitates further shuffling of the surfaces in most cases. Independent of this, judgement of the final adhesion can only be assessed after a few days.

In many instances, the adhesion can be improved also by activation of the completely dry, uncured adhesive layer with solvent. A very thin layer of technicoll 8035 is applied with a sponge or cloth onto the adhesive layer.

Joining must take place immediately

**Delivery**

750 g tin: **Part No. 820 001**  
minimum delivery: 10 tins

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**Material Specifications**

Viscosity	800–1600 mPas
Solids content	approx. 22% by weight
Density	approx. 0.85 g/cm <sup>3</sup>
Ph value	–
Appearance	brown-yellow, transparent
Precautions	see Safety Data Sheet
Shelf life	12 months at 15 °C to 25 °C in unopened pack
Cold characteristics	Thickening will occur at low temperatures. Fully usable on re-warming to working temperature.
Pot time	approx. 4 hrs
Full curing time	approx. 3 days
Working temperature	+15 °C to +25 °C
Drying/waiting time	1–3 min
Contact adhesion time	15–20 min
Application/equipment	brush, spreader, roller
Usage	150–250 g/m <sup>2</sup> wet (manual application)

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Nibopren N730  
contact adhesive

## Brief description

### Description

### Contact adhesive

Nibopren N730 is a high quality contact adhesive for laying textile floor coverings on steps and walls, strips, profiles and coverings of PVC, rubber and cork as well as in technical areas for many combination joints in leather, rubber, felt, metal, cork, timber, hard PVC, foam substances (except for polystyrol foams such as Styropor), etc. Especially suitable for laying on stairways.

### Usage

approx. 300 g/m<sup>2</sup> for two-sided application

### Preparation

In accordance with the requirements of DIN 18365 (or other applicable standards for laying), the base must be level, permanently dry, clean, free of cracks, tension and pressure free and, if necessary, should be prepared to the required standard. To this end, suitable foundations and filler substances should be applied. Poured asphalt layers and grounds sensitive to solvents must be covered with a minimum thickness layer of 2 mm.

Before jointing, it may be advisable to remove lubricants and isolating materials from strips and profiles. Use SOLVENT 300 for this purpose.

The materials to be joined must be dry. Moisture content of timber should be 8-12%.

For jointing internally on plaster, this must be firm and unpainted. All materials should be acclimatised in accordance with manufacturers' recommendations.

### Features

- bright colour
- low viscosity
- easily spread
- long contact adhesive time

### Delivery

Colour	600 g tin Part No.	4,5 kg pail Part No.	9 kg pail Part No.	25 kg pail Part No.
transparent	<b>820 301</b>	<b>820 304</b>	<b>820 302</b>	<b>820 303</b>

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**Material Specifications**

Chemical base	polychloroprene , contains solvent
Colour	almost transparent
Density	0.81 g/cm <sup>3</sup>
Viscosity	can be brushed or rolled on
Working temperature	between 15 °C and 20 °C
Temperature stability	approx. 60 °C
Suitability for chair castor loading	yes (castors according to DIN 68131)
Suitability on under-floor heating	yes
GISCODE	S1
Danger classification VbF	A1
Dangerous substance classification	slightly flammable
Solvent and cleaner	Solvent 300
Shelf life	12 months

**Adhesive application**

Stir adhesive before use. Keep pack closed in work breaks. Nibopren N730 should be uniformly applied with a brush or a fine toothed spreader onto both surfaces. Avoid build-up of adhesive. Protect exposed adhesive surfaces against dust and draughts. Strongly porous surfaces should be coated at least twice with adhesive so that a sealed adhesive film remains on the outer surface. The second coat should only be applied when the first has thoroughly dried out.

**Drying time/contact adhesion time**

After application, the adhesive coat should be allowed to dry out. The parts can be brought together when the adhesive does not stick when pressed with a finger (finger test). This is dependent on coat thickness, material and ambient conditions and is normally after 10-20 minutes. The dried contact surfaces are workable for some time after this. Several hours should not be exceeded, as the contact tackiness is strongly dependent upon the adhesive coat thickness, the nature of the surfaces, room temperature and humidity.

**Adhesion**

The surfaces to be joined must be accurately aligned as subsequent shuffling is not possible. The surfaces should then be briefly and firmly pressed together. The greater the pressure the stronger the bond.

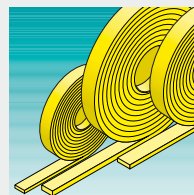
The required pressure can under some circumstances be applied with a pressure roller.

Inclusion of air bubbles should be avoided. Avoid bending the bonded surfaces.

On account of the initial strength of the bond, the bonded surfaces are normally ready for immediate use. Final curing of the adhesive is reached only after a few days.

Note the instructions of the cover and material manufacturer.

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Sealing and adhesive tape



PVC foam tape 3257/3259

## Brief description

### Description

## Single-sided adhesive PVC foam tape

PVC foam tape 3257/3259 is a medium hard, closed-cell PVC foam, single-sided coated with acrylic adhesive. The foam tape is an effective protection against water, dirt and moisture. In addition, it is also effective in the reduction of vibrations and noise transmissions.

### Features

- economical in use
- easy and clean in application
- time independent – usage, storage, uses
- rapid adhesion – no drying or waiting times
- adaptable – suitable for any size
- permanent – not affected by mechanical or normal climatic conditions.

### Typical applications

- as a water seal
- sealing of container bodies
- vibration suppression
- base tape for glazing uses
- sealing tape for air conditioning and ventilation
- sealing of housings
- as façade and roof seal
- vibration seal, etc.

### Material Specifications

Density	160 kg/m <sup>3</sup>
Required compression	30%
Restorative power	97%
Adhesion	13 N/25 mm after 24 hrs
Tensile strength	> 45 N/cm <sup>2</sup>
Breaking strain	> 120%
UV resistance	good
Chemical resistance	Good against dilute acids and alkaline solutions
Temperature range	-30 °C to +70 °C
Flammability rating	DIN 4102-B2
Shelf life	12 months at 20 °C ambient temperature
Approved for	according to DW 142 for high pressure ducts
Hardness (Shore 00)	25
Required effort for compression	4.0 N/cm <sup>2</sup>
Restorative power after 1 min	3.2 N/cm <sup>2</sup>
Peeling resistance after 10 min	> 5.0 N/25 mm width

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## 82.01.01.2

Sealing and adhesive tapes

Single-sided adhesive

**PVC foam tape 3257/3259****Suitable surfaces**

The surfaces must be dry, dust and grease free.

**Processing**

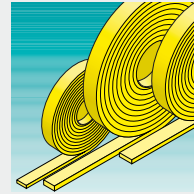
Directly from the roll with uniform pressure. Surfaces must be free from dust and grease.  
Remove protective paper after sticking down.

**Delivery**

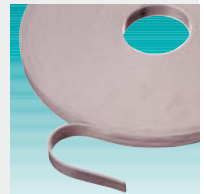
Dimensions Thickness x width mm	Length per roll m	Part No. grey 3257 SP unit = roll	Part No. black 3259 SP unit = roll
1.5 x 15	50	<b>815 215</b>	<b>815 200</b>
1.5 x 20	50	<b>815 216</b>	<b>815 201</b>
1.5 x 25	50	<b>815 225</b>	<b>815 202</b>
1.5 x 30	50	<b>815 230</b>	<b>815 203</b>
1.5 x 35	50	<b>815 231</b>	<b>815 204</b>
1.5 x 40	50	<b>815 232</b>	<b>815 205</b>
3.0 x 15	25	<b>815 235</b>	<b>815 206</b>
3.0 x 20	25	<b>815 239</b>	<b>815 207</b>
3.0 x 25	25	<b>815 240</b>	<b>815 208</b>
3.0 x 30	25	<b>815 245</b>	<b>815 209</b>
3.0 x 35	25	<b>815 246</b>	<b>815 210</b>
3.0 x 40	25	<b>815 250</b>	<b>815 211</b>
3.0 x 50	25	<b>815 255</b>	<b>815 212</b>
3.0 x 70	25	<b>815 260</b>	<b>815 213</b>
4.5 x 15	15	<b>815 251</b>	<b>815 295</b>
4.5 x 20	15	<b>815 252</b>	<b>815 281</b>
4.5 x 25	15	<b>815 253</b>	<b>815 283</b>
4.5 x 30	15	<b>815 254</b>	<b>815 296</b>
4.5 x 35	15	<b>815 256</b>	<b>815 285</b>
4.5 x 40	15	<b>815 257</b>	<b>815 284</b>
6.0 x 15	12	<b>815 258</b>	<b>815 289</b>
6.0 x 20	12	<b>815 259</b>	<b>815 290</b>
6.0 x 25	12	<b>815 261</b>	<b>815 291</b>
6.0 x 30	12	<b>815 262</b>	<b>815 292</b>
6.0 x 35	12	<b>815 263</b>	<b>815 293</b>
6.0 x 40	12	<b>815 264</b>	<b>815 294</b>

Further dimensions on request

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Sealing and adhesive tape



PVC foam tape 3507/3509

## Brief Description

### Description

### Single-sided adhesive PVC foam tape

PVC foam tape 3507/3509 is a hard, closed-cell PVC foam, single-sided coated with an aggressive, pressure sensitive acrylic adhesive. The foam tape is an effective protection against water, dirt and moisture.

### Features

- easy and clean in application
- rapid adhesion – no drying or waiting times
- permanent bond
- economical in use
- approval in accordance with DW 142 for high pressure ducts
- high density and Shore Hardness

### Typical applications

- as a water seal in a variety of applications
- sealing of container bodies
- vibration suppression
- base tape for glazing uses
- sealing tape in air conditioning and ventilation applications
- sealing of housings
- as façade and roof seal
- vibration seal, etc.

### Material Specifications

Density	260 kg/m <sup>3</sup>
Colour	grey and black
Required compression	30%
Restorative power	95%
Adhesion	13 N/25 mm after 24 hrs
Tensile strength	> 95 N/cm <sup>2</sup>
Breaking strain	> 150%
UV resistance	good
Chemical resistance	good against dilute acids and alkaline solutions
Temperature range	-30 °C to +70 °C
Flammability rating	DIN 4102-B2
Storage time	12 months at 20 °C ambient temperature
Approved for	according to DW 142 for high pressure ducts
Hardness (Shore 00)	50
Required effort for compression	8.0 N/cm
Restorative power after 1 min	7.0 N/cm <sup>2</sup>
Peeling resistance after 10 min	> 5.0 N/25 mm width

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## 82.01.02.2

Sealing and adhesive tapes

Single-sided adhesive

### PVC foam tape 3507/3509

#### Suitable surfaces

The adhesive surfaces must be dry, dust and grease free.

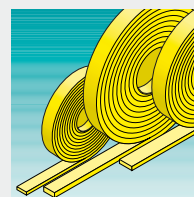
#### Processing

Directly from the roll with uniform pressure. Surfaces must be free from dust and grease. Remove protective paper after sticking down.

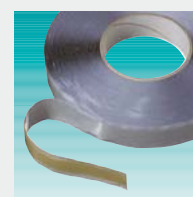
#### Delivery

Dimensions Thickness x width mm	Length per roll m	Part No. grey 3207 SP unit = roll	Part No. black 3209 SP unit = roll
0.8 x 15	60	815 301	815 351
0.8 x 20	60	815 302	815 352
0.8 x 25	60	815 303	815 353
0.8 x 30	60	815 304	815 354
0.8 x 35	60	815 305	815 355
0.8 x 40	60	815 306	815 356
1.5 x 15	50	815 311	815 361
1.5 x 20	50	815 312	815 362
1.5 x 25	50	815 313	815 363
1.5 x 30	50	815 314	815 364
1.5 x 35	50	815 315	815 365
1.5 x 40	50	815 316	815 366
3.0 x 15	25	815 321	815 371
3.0 x 20	25	815 322	815 372
3.0 x 25	25	815 323	815 373
3.0 x 30	25	815 324	815 374
3.0 x 35	25	815 325	815 375
3.0 x 40	25	815 326	815 376
4.5 x 15	15	815 331	815 381
4.5 x 20	15	815 332	815 382
4.5 x 25	15	815 333	815 383
4.5 x 30	15	815 334	815 384
4.5 x 35	15	815 335	815 385
4.5 x 40	15	815 336	815 386
6.0 x 15	12	815 341	815 391
6.0 x 20	12	815 342	815 392
6.0 x 25	12	815 343	815 393
6.0 x 30	12	815 344	815 394
6.0 x 35	12	815 345	815 395
6.0 x 40	12	815 346	815 396

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Sealing and adhesive tapes



Rubber resin adhesive tape 0485

## Brief description

### Description

### Double-sided rubber resin adhesive tape

Solvent free, flexible, extruded, powerful, double-sided construction tape for bonding metallic and non-metallic materials. Excellent adhesive qualities on polyethylene foil. Thickness: 0.4 and 1.0 mm; colour: milky-translucent (honey).

### Features

- pre-formed sizes if required
- clean, convenient alternative to adhesives that are applied by spreading or by gun
- very strong, pressure sensitive adhesive material
- non-hardening, permanently elastic
- exceptional adhesive strength
- no drying time
- no vapours, solvent-free

### Typical applications

- decorative trim in furniture manufacture, aluminium, hard PVC and timber fixings, cloth fabrics on venetian blinds, fixing mirrors onto synthetic material cabinets, armrest upholstery on chair frames
- boats and commercial vehicles: internal panelling, carpets, internal coverings of transport containers for chemicals and foodstuffs.
- additional uses: pond liner seams, sack and bag seams, polystyrene layers in protective helmets, case frame material, glass fibre reinforced polyester, etc.

### Delivery

Dimensions Thickness x width mm	Length per roll m	Part No. honey SP unit = roll
0.4 x 12	30	<b>815 661</b>
0.4 x 19	30	<b>815 662</b>
0.4 x 25	30	<b>815 663</b>
1.0 x 12	20	<b>815 664</b>
1.0 x 19	20	<b>815 665</b>
1.0 x 25	20	<b>815 666</b>

### Suitable surfaces

Surfaces must be dry, clean and grease free.

### Processing

Direct by hand from the roll. Press 0485 tape firmly on to the surface, press other surface firmly onto the exposed tape.

### Note

Material Specifications, see reverse

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**Rubber resin adhesive tape 0485****Material Specifications**

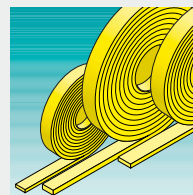
Extension	1000%
Adhesion	excellent, even on polyethylene and rubber, however, PVC plasticizers should be avoided
Dynamic tensile strength	50 N/cm <sup>2</sup>
Adhesive strength 180 °	200 N/25 mm
Static shear strength at 22 °C	movement of 25 x 25 mm - surface = 6 mm weight 5N in 500 hrs
Density	0.98 g/cm <sup>2</sup>
Operating temperature	-10 °C to +60 °C
Storage time	1 year at an ambient temperature of 20 °C
UV resistance	not resistant, must be protected
Chemical resistance	Chemicals, petrol and oil attack the product. The degree of impairment depends upon the application.
Toxicity	none
Water absorption	none

**Processing**

Directly from the roll with uniform pressure. Surfaces must be dust and grease free. Remove protective paper after sticking down.

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Sealing and adhesive tapes



Power Bond 5300

## Brief description

### Description

## Double-sided acrylic adhesive tape

Power Bond 5300 is derived from foamed acrylic, coated sides with powerful acrylic adhesive, transparent with extremely high tensile and solar values. Thermal loading

### Features

- exceptional final adhesion
- exceptional adhesive power
- excellent weathering characteristics
- UV resistant
- economical, easy and rapid application
- extremely high density

### Typical applications

- fixing decorative trim and emblems
- fixing spoilers on cars
- fixings in print, building, furniture and metal industries
- fixing outer skins in bodywork construction
- Chrysler MS-CH 159 Type C, General Motors 998 586 approvals

### Delivery

Dimensions Thickness x width  mm	Length per roll  m	Part No. Transparent with white liner SP unit = roll
0.64 x 12	50	<b>815 601</b>
0.64 x 19	50	<b>815 602</b>
0.64 x 25	50	<b>815 603</b>
1.14 x 12	30	<b>815 604</b>
1.14 x 19	30	<b>815 605</b>
1.14 x 25	30	<b>815 606</b>

### Suitable surfaces

Clean surfaces with Isopropanol. Surfaces must be dry, clean and grease free.

### Processing

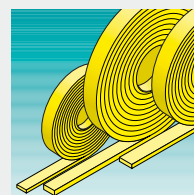
Directly from the roll.

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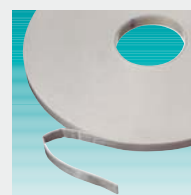
**Material Specifications**

Density	1000 kg/m <sup>3</sup>
Adhesive strength	45 N/25 mm after 24 hrs
Static shear strength	1.5 N/cm <sup>2</sup> at room temperature after 500 hrs
Dynamic shear strength	50 N/cm <sup>2</sup>
70° shear strength	1.0 N/cm <sup>2</sup> after 150 hrs without shrinkage
Tensile strength	> 150 N/cm <sup>2</sup>
Stretch	> 700%
Cold impact test at -30 °C	> 100 blows
Chemical resistance	good for dilute acids and alkalis
Petrol and oil resistance	meets specs. of OEM's
UV resistance	very good
Working temperature	+5 °C to +40 °C
Operating temperature	-40 °C to +120 °C
Storage stability at room temp.	1 year

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Sealing and adhesive tapes



PE Foam adhesive tape 5454

## Brief description

## Double-sided PE foam adhesive tape

### Description

Low density PE foam, both sides coated with interlinked, synthetic rubber resin adhesive, protected with white paper.  
Thickness: 3 mm

### Features

- economical
- quick and easy to use
- clean in use
- permanent bond
- marginal causticity

### Typical applications

- commercial applications:  
fixing promotional materials to goods; display articles
- home use:  
bonding a variety of fittings and fixtures, e.g. soap dishes

### Material Specifications

Dimensions Thickness x width mm	Length per roll m	Part No. white SP unit = roll
3.0 x 12	25	<b>815 651</b>
3.0 x 19	25	<b>815 652</b>
3.0 x 25	25	<b>815 653</b>

### Suitable surfaces

Surfaces must be dry, clean and grease free.

### Processing

By hand directly from the roll applying uniform pressure.

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82.02.03.2

Sealing and adhesive tapes

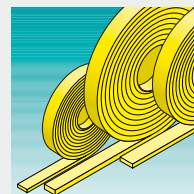
Double-sided adhesive

## PE foam adhesive tape 5454

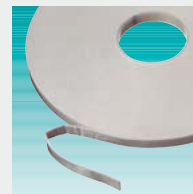
### Material Specifications

Density	35 kg/m <sup>3</sup>
Colour	white
Adhesive strength	16 N/25 mm width after 24 hrs
Static shear strength	6.0 N/cm <sup>2</sup> after 500 hrs
Max load capacity	30 g/cm <sup>2</sup>
Dynamic shear strength	16.5 N/cm <sup>2</sup>
Tensile strength	> 55 N/cm <sup>2</sup>
Stretch	> 110%
Chemical resistance	good for dilute acids and alkalis
UV resistance	not recommended where adhesive is directly exposed to UV
Temperature stability	-40 °C to +70 °C
Working temperature	+15 °C to +40 °C
Shelf life	1 year at an ambient temperature of 20 °C

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Sealing and adhesive tapes



PE Foam adhesive tape 5464

## Brief description

## Double-sided PE foam adhesive tape

### Description

PE foam, both sides coated with acrylic adhesive and protected with paper liner.  
Also available with PE liner

### Features

- good adhesion
- UV resistant
- economical, quick and easy to use
- permanent bond
- universal application

### Typical applications

- mirror fixing in furniture industry
- bonding steel-aluminium
- bonding steel-synthetic materials
- bonding cable ducting
- bonding bathroom fittings
- bonding window glazing bars
- display tape window industry
- display glazed tiles, etc.
- automotive:  
fixing protective strips and emblems in DIY field
- approvals: RÖHM and Co., LGA Nürnberg, General Electric Plastics

### Delivery

Dimensions Thickness x width mm	Length per roll m	Part No. white SP unit = roll
1.0 x 12	60	<b>815 631</b>
1.0 x 19	60	<b>815 632</b>
1.0 x 25	60	<b>815 633</b>
2.0 x 12	30	<b>815 634</b>
2.0 x 19	30	<b>815 635</b>
2.0 x 25	30	<b>815 636</b>

### Suitable surfaces

Surfaces must be dry, clean and grease free.

### Processing

By hand directly from the roll applying uniform pressure.

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82.02.04.2

Sealing and adhesive tapes

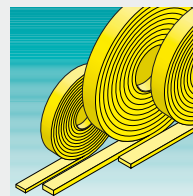
Double-sided adhesive

## PE foam adhesive tape 5464

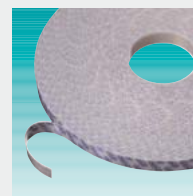
### Material Specifications

Density	≈ 70 kg/m <sup>3</sup>
Colour	white
Adhesive strength	23 N/25 mm width after 24 hrs
Static shear strength	4.8 N/cm <sup>2</sup> after 500 hrs
Tensile strength	> 100 N/cm <sup>2</sup>
Breaking strain	> 150%
Chemical resistance	good for dilute acids and alkalis
UV resistance	very good
Temperature stability	-40 °C to +80 °C
Working temperature	+5 °C to +35 °C
Shelf life	1 year at an ambient temperature of 20 °C
Flammability rating	< 100 mm/min

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Sealing and adhesive tapes



PE Foam adhesive tape 5474

## Brief description

### Description

### Double-sided PE foam adhesive tape

PE foam, both sides coated with synthetic, interlocked rubber resin adhesive, protected with paper (also available with PE liner). Especially suitable for fixing mirrors.

### Features

- very good adhesive strength
- economical
- quick and easy to use
- clean in use
- permanent bond
- marginal causticity

### Typical applications

- mirrors:  
for fixing of household and furniture mirrors
- bonding decorative scanner strips
- trade:  
for securing promotional material to goods
- approvals:  
Regional Promotional Commission, Nürnberg  
Röhm, Darmstadt  
Vegla, Aachen  
RÖHM and Co., LGA Nürnberg, General Electric Plastics

### Delivery

Dimensions Thickness x width mm	Length per roll m	Part No. white SP unit = roll
1.0 x 12	60	815 621
1.0 x 19	60	815 622
1.0 x 25	60	815 623
2.0 x 12	30	815 624
2.0 x 19	30	815 625
2.0 x 25	30	815 626

### Suitable surfaces

Surfaces must be dry, clean and grease free.

### Processing

By hand directly from the roll applying uniform pressure.

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82.02.05.2

Sealing and adhesive tapes

Double-sided adhesive

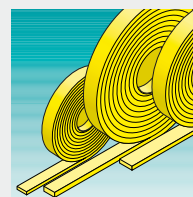
## PE foam adhesive tape 5474

### Material Specification

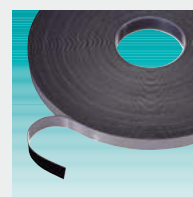
Density	67 kg/m <sup>3</sup>
Colour	white
Adhesive strength	27 N/25 mm width after 24 hrs
Static shear strength	7.0 N/cm <sup>2</sup> after 500 hrs
Max. load capacity	36 g/cm <sup>2</sup>
Dynamic shear strength	41 N/cm <sup>2</sup>
Tensile strength	> 100 N/cm <sup>2</sup>
Stretch	> 150%
Chemical resistance	good for dilute acids and alkalis
UV resistance	not recommended where adhesive is directly exposed to UV
Temperature stability	-40 °C to +70 °C
Working temperature	+15 °C to +40 °C
Shelf life	1 year at an ambient temperature of 20 °C

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Sealing and adhesive tapes



PE Foam adhesive tape 5589

## Brief description

### Description

## Double-sided PE foam adhesive tape

PE foam with coated acrylic adhesive, double density with white paper liner, 200 kg/m³.  
Main applications: automobile industry/decorative strips - emblems

### Features

- good adhesive strength
- high density
- UV resistant
- economical, quick and easy to use

### Typical applications

- especially for bonding decorative strips and emblems in the automobile industry
- bonding tape in the manufacture of optical lenses
- meets most of the OEM specifications:  
WSK-M3G 184-A1  
WSK-M11P 49-A  
WSK-M11P 57-A Emblems  
Ford approval OZZB  
BMW 60045.0 Emblems

### Delivery

Dimensions Thickness x width mm	Length per roll m	Part No. black SP unit = roll
0.8 x 12	60	<b>815 641</b>
0.8 x 19	60	<b>815 642</b>
0.8 x 25	60	<b>815 643</b>

### Suitable surfaces

Surfaces must be dry, clean and grease free.

### Processing

Directly from the roll.

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82.02.06.2

Sealing and adhesive tapes

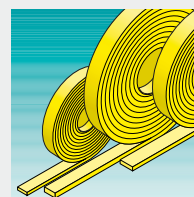
Double-sided adhesive

## PE foam adhesive tape 5589

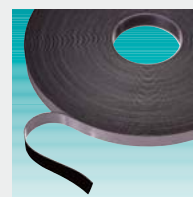
### Material Specifications

Density	200 kg/m <sup>3</sup>
Colour	black
Adhesive strength	20 N/25 mm width after 24 hrs
Static shear strength	1.5 N/cm <sup>2</sup> after 500 hrs
Shear strength at 70 °C	2 N/cm <sup>3</sup> after 150 hrs
Tensile strength	> 200 N/cm <sup>2</sup>
Breaking strain	> 300%
Max. load capacity	7.2 g/cm <sup>2</sup>
Cold impact test	> 100 blows at -40 °C
Petrol – oil resistance	good
Chemical resistance	good
UV resistance	very good
Operating temperature	-40 °C to +80 °C short term to 120 °C
Shelf life	1 year at an ambient temperature of 20 °C

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Sealing and adhesive tapes



PUR Foam adhesive tape 5669

## Brief description

### Description

### Double-sided PUR foam adhesive tape

PU foam, coated on both sides with interlinked acrylic adhesive and covered in white paper (can also be supplied with PE liner). For bonding emblems and decorative strips in the automobile industry.

### Features

- good adhesive strength
- high temperature resistance
- high density
- UV resistant
- economical, quick and easy to use

### Typical applications

Special adhesive tape for the automotive industry

- bonding decorative strips
- bonding emblems
- for all bondings subjected to raised temperatures
- meets most of the OEM specifications:
- meets Ford: WSK-M3G 184-A4  
WSK-M3G 162-A3
- meets Rover: BLS 22 LA02
- meets: WSK-M 11 P48-A  
WSK-M 11 P49-A  
WSL-M 11 P51-A

### Delivery

Dimensions Thickness x width mm	Length per roll m	Part No. black SP unit = roll
0.4 x 12	60	<b>815 611</b>
0.4 x 19	60	<b>815 612</b>
0.4 x 25	60	<b>815 613</b>
0.8 x 12	60	<b>815 614</b>
0.8 x 19	60	<b>815 615</b>
0.8 x 25	60	<b>815 616</b>

### Suitable surfaces

Surfaces must be dry, clean and grease free.

### Processing

Directly from the roll.

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Sealing and adhesive tapes

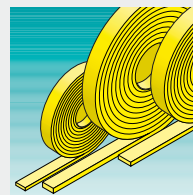
Double-sided adhesive

## PUR foam adhesive tape 5669

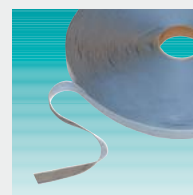
### Material Specifications

Density	325 kg/m <sup>3</sup>
Colour	black
Adhesive strength	19 N/25 mm width after 24 hrs
Static shear strength	3 N/cm <sup>2</sup> after 500 hrs
Shear strength at 70 °C	2 N/cm <sup>2</sup> after 150 hrs
Tensile strength	> 200 N/cm <sup>2</sup>
Breaking strain	> 300%
Max. load capacity	15 g/cm <sup>2</sup>
Cold impact test	> 100 blows at -40 °C
Petrol-oil resistance	good
Chemical resistance	good
UV resistance	very good
Operating temperature	-40 °C to +120 °C
Shelf life	1 year at ambient temperature of 20 °C
Test	carried out in accordance with Aera Norm 4001 and 4012

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Sealing and adhesive tapes



Butyl sealing tape 0303

## Brief description

### Description

## Butyl sealing tape

Flexible, extruded sealing tape for overlaps in metallic and non-metallic materials.

### Features

- simple to use
- solvent free and no smell
- shrinkage free
- ageing and weather resistant
- UV resistant

### Typical applications

- Caravans:  
All joints where the fixings pass through the outer layers. Overlapping surfaces at wall and corner sections.
- commercial vehicles:  
Protective edges, roof struts and corner joint sections before mechanical assembly.  
External sealing on sliding roofs.

### Delivery

Dimensions Thickness x width mm	Length per roll m	Minimum delivery rolls	Part No. grey SP unit = roll
1.5 x 12	30	22	<b>817 701</b>
1.5 x 19	30	160	<b>817 702</b>
3.0 x 12	15	22	<b>817 704</b>
3.0 x 19	15	16	<b>817 705</b>
3.0 x 25	15	12	<b>817 706</b>

### Suitable grounds

Surfaces must be dry, clean and grease free.

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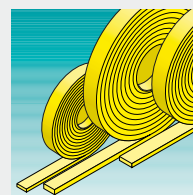
**Material Specifications**

Composition	mixture of synthetic rubber resin and inert fillers
Colour	grey (also black, white, teak, brown)
Tolerances	
Thickness	±10%
Width to 15 mm	±1.0 mm
	between 15 and 25 mm ±1.5 mm
	over 25 mm ±2.0 mm
Joint movement	±10%
Extension at 100 mm/min	< 140%
Stability of adhesion	exceptional for aluminium, steel, glass, wood, synthetic materials including polyethylene
Dynamic shear strength	16 N/cm <sup>2</sup>
Force for 20% compression	6 N/cm <sup>2</sup>
Density	1.7 g/cm <sup>3</sup>
Operating temperature	-40 to +90 °C
Long term durability	> 20 years
Shelf life	1 year in dry conditions at 20 °C
UV resistance	very good
Chemical resistance	good against dilute acids/alkalis poor against organic solvents
Toxicity	no known risks
Water absorption	none
Water vapour permeability	0.25 g/m <sup>2</sup> /24 hrs per 1 mm thickness
Application temperature	> 4 °C

**Processing**

Usage: By hand directly from the roll, remove paper.

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Sealing and adhesive tapes



Butyl sealing tape 0390

## Brief description

### Description

### Butyl sealing tape

Flexible, extruded sealing tape with very good adhesive power especially on polyethylene foil.

### Features

- simple to use
- shrinkage free
- UV resistant
- very good adhesion
- drinking water tolerant up to 85 °C

### Typical applications

- commercial vehicles:  
Sealing along protective edges, corner joint sections, roof struts, around window openings and repair work as well as external seals around sliding roofs .
- Electrical:  
As cable ties for electrical cables in hollow walls and ducts, fixing glass in frames of reproduction lamps.

### Delivery

Dimensions Thickness x width mm	Length per roll m	Minimum delivery rolls	Part No. black SP unit = roll
1.0 x 12	45.0	22	<b>817 711</b>
1.0 x 19	45.0	16	<b>817 712</b>
1.0 x 25	45.0	14	<b>817 713</b>
2.0 x 12	22.5	22	<b>817 714</b>
2.0 x 19	22.5	16	<b>817 715</b>
2.0 x 25	22.5	14	<b>817 716</b>

### Suitable surfaces

Surfaces must be dry, clean and grease free.

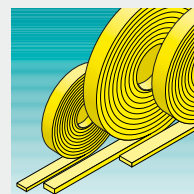
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**Butyl sealing tape 0390****Material Specifications**

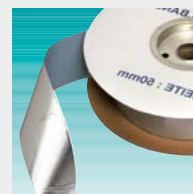
Composition	mixture of synthetic rubber resin and inert fillers
Colour	black
Tolerances	
Thickness	±10%
Width to 15 mm	±1.0 mm
Between 15 and 25 mm	±1.5 mm
Over 25 mm	±2.0 mm
Joint movement	±20%
Extension at 100 mm/min	> 300%
Stability of adhesion	exceptional for aluminium, steel, glass, wood, synthetic materials including polyethylene
Dynamic shear strength	16 N/cm <sup>2</sup>
Force for 20% compression	5 N/cm <sup>2</sup>
Density	1.1 g/cm <sup>3</sup>
Operating temperature	-40 to +90 °C
Long term durability	> 20 years
Shelf life	1 year in dry conditions at 20 °C
UV resistance	very good
Chemical resistance	good against dilute acids/alkalis poor against organic solvents
Toxicity	no known risks
Water absorption	none
Water vapour permeability	0.25 g/m <sup>2</sup> /4 hrs per 1 mm thickness
Application temperature	> 4 °C

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Sealing and adhesive tapes



Butyl sealing tape 0316

## Brief description

### Description

### Butyl sealing tape

Extruded sealing tape with aluminium coloured, UV resistant foil and good adhesive properties. Ideal sealing tape for conservatory and façade construction.

### Features

- simple to use
- good adhesion
- UV resistant
- tested: approval Röhme, Darmstadt

### Typical applications

- in conservatory and façade construction
- as seal between chimney and roof
- seal for butted joints in glass construction
- repair tape for sloping roofs
- joint sealant for porch roofs and structural walls
- adheres especially well to steel, aluminium, glass, wood, synthetic materials, concrete, structural walls

### Delivery

Dimensions Thickness x width mm	Length per roll m	Part No.  SP unit = roll
1.5 x 40	20	<b>817 721</b>
1.5 x 50	20	<b>817 722</b>
1.5 x 60	20	<b>817 723</b>
1.5 x 80	20	<b>817 724</b>

### Suitable surfaces

Surfaces must be dry, clean and grease free.

### Processing

Directly from the roll with uniform pressure on the seal position

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Sealing and adhesive tapes

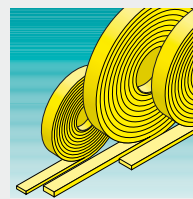
Butyl tapes

## Butyl sealing tape 0316

### Material Specifications

Composition	mixture of synthetic rubber and inert fillers
Density	1.58 g/cm <sup>3</sup>
Adhesion	very good
Temperature range	-40 to +80 °C
Working temperature	+10 to +40 °C
Long term durability	20 years
Shelf life	1 year at 20 °C
Chemical resistance	good against dilute acids/alkalis
Water absorption	none
Toxicity	none
UV resistance	very good

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Sealing and adhesive tapes



Bostik Prestik AE 3301

## Brief description

### Description

### Butyl sealing tape

Malleable sealant material in profile form (round and flat profiles); for internal and external applications; for sealing joints which are not mechanically stressed or which are not required to transmit stresses. Delivered on rolls.

### Features

- shrinkage free
- ageing and weather resistant
- solvent free and no smell
- simple in use

### Typical applications

For internal and external applications, e.g.

- vibration and acoustic damping
- corrosion protection on sheet joints
- bedding joints on window seats and stairways
- not suitable for joints subjected to constant water presence

On rolls with a supporting foil, which prevents collapse of the profile form.

### Delivery

Cross section mm	Length per roll m	Standard packing unit rolls	Part No. light grey
∅ 5	103	3	<b>817 817</b>
∅ 6	120	3	<b>817 818</b>
20 x 2	64	6	<b>817 824</b>
40 x 2	32	6	<b>817 827</b>
10 x 3	66	6	<b>817 828</b>
20 x 3	44	6	<b>817 830</b>
30 x 3	33	6	<b>817 832</b>

### Suitable surfaces

Surfaces must be dry, dust and oil free. On smooth, firm surfaces, Prestik AE 3301 adheres very well over long periods of contact.

### Note

See reverse for Material Specifications

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**Material Specifications**

Composition	synthetic rubber
Colour	light grey
Density	1.75 g/ml
Solvent	none
Shrinkage	none
Ageing characteristics	very good
Form retention	In unloaded condition, retains form; when loaded, plastic flow form without transmission of force.
Contact with other materials	Protects metals against corrosion at contact point; on contact with synthetic materials, plasticizing is possible. Trials should be carried out.
Temperature stability	From -30 °C to +90 °C. the sealant remains thermo-plastic. At low temperatures, hardening increases; at high temperatures, the material becomes softer and more easily formed.
Shelf life	Minimum of 2 years; store in cool and dry conditions. In order to avoid distortion of the profile, store the roll lying down and protect against dust and mechanical deformation.

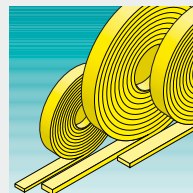
**Processing**

Where possible, the roll should be suspended in a roller dispenser unit. Cut off individual lengths with a scissors. The sections should be carried with the transport foil in position so that the section does not stretch. The section is positioned on the point to be sealed and pressed into position; the foil is then removed. Rectangular profiles are especially suited for maintaining fixed spacings. Round profiles adapt well to varying thicknesses and are preferred for taking up tolerances. For permanent water conditions, seals with PRESTIK AE should not be used. Excessive pressure on the components is to be avoided. Press in any very thin, flexible sections by means of a wooden baton or similar tool. Over painting of the profile is possible (with oil, alkyd or DD-paints); plasticizing discolouration can, however, occur. Trials should be carried out.

**Contact with other materials**

Protects metal against corrosion at the point of contact; plasticizing can occur on contact with some synthetic materials. We recommend that trials should be carried out.

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Sealing and adhesive tapes



Seam, butt and raised joints

## Brief description

### Description

## Butyl sealing tape

Prestik kneadable putty is a formless, viscoplastic, hand kneadable, self-adhesive sealant (butyl).

### Brief description

removable sealing

### Features

- semi-soft plastic
- kneadable
- self-adhesive

### Typical applications

For internal and external seals which are not subjected to constant water and/or exposed directly to the effects of weathering. Sealing on walls, deck openings, for example for pipe work, fans in sanitary work, balconies and terrace run-offs, clay and fibreglass-cement outlet pipes, cracks in walls, around doors and windows as well as for vehicles. Prestik kneading seal is not intended for normal types of joint (bedding and expansion joints) but for on-site sealing and sealing repair work. Only conditionally suitable for joints subject to movement. Prestik kneading seal remains permanently plastic and does not harden like normal window putty.

### Delivery

Colour	Packet 250 g (SP 20 per carton)	Packet 950 g (SP 24 per carton)
Blue-grey	818 376	818 336

### Suitable surfaces

Surfaces must be dry, firm, dust and grease free. As dust-free conditions on building sites can not be guaranteed, it is recommended that the surfaces to be sealed be first well cleaned (brushed off) before Prestik is applied. New and old sealants mix with each other. Weathered or contaminated surfaces must first be removed.

### Material Specifications

Composition	polyisobutylen
Colour	blue-grey
Density	1.6 g/ml
Solvent	none
Shrinkage	none
Resistance to weathering	good, does not become brittle. Direct weathering causes discolouration and drying out of the surface.
Temperature stability	approx. -30 °C to +90 °C. The sealant remains thermoplastic. At low temperatures, hardness increases, at higher temperatures, it becomes softer and more easily formed.

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Sealing and adhesive tapes

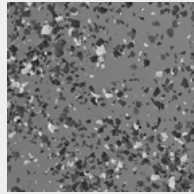
Butyl tapes

## **Prestik kneading seal**

### **Processing notes**

Prestik kneading seal is self-adhesive and is kneaded or pressed into the joint to be sealed. Prestik kneading seal is non-contaminating, any residues can be easily wiped off smooth surfaces.

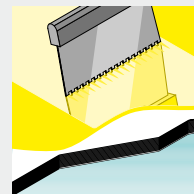
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GETO Marothaan  
Colour Chips Flow Floor



GETO Marothaan



GETO Marothaan



GETO Marothaan

## Brief description

### Description of GETO® Marothaan

GETO Marothaan is a solvent-free, manually applied, self-levelling two-component polyurethane floor coating with superb attributes after curing. The excellent tensile strength with a high breaking strain, as well as the high abrasion and tear resistance levels, are of particular note. Thanks to GETO Marothaan's excellent mechanical attributes, low layer thicknesses of between two and a maximum of four millimetres (depending on application purpose) are sufficient.

Advantage: Low weight and material coverage per m<sup>2</sup>.

## Usage

GETO Marothaan is suitable for coating utility vehicles and renovating floors.

Used for:

- All types of utility vehicles
- Refrigerated lorries
- Fresh goods vehicles
- Furniture vans
- Access ramps, lifting platforms, garages, storage areas

The seamless application in the case of intersections results in a lasting ageing-resistant floor coating with automatic sealing and corrosion protection features.

### Features of GETO® Marothaan

- Low weight and material coverage per m<sup>2</sup>.
- Highly elastic, approx. 50% breaking strain
- Temperature resistant from -40 °C to +90 °C
- Free of solvents and softeners
- Easy to apply
- Self-levelling
- Individual design possible
- Abrasion-proof and slip-proof
- Resistant to organic attack
- High level of compressive strength
- Chemical resistance (enquire in specific cases)
- Water vapour diffusionable
- Maximum ageing resistance
- Meets food safety requirements (TNO certification in accordance with 90/128/EEC)
- Noise insulating
- UV-resistant seal possible
- Non-conductive (but therefore vulnerable to a static charge).

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83.01.01.2  
Floor covering system  
Polyurethane based  
**GETO®** Marothaan

**Suitable surfaces**

The use of appropriate primers allows application to almost any surface:

- Timber
- Fibreglass-reinforced plastic, polyester
- Aluminium
- Steel
- Old PU/epoxy coatings
- Concrete

**Shades**

- Concrete grey similar to RAL 7023<sup>1</sup>
- Other shades on request (minimum purchase quantity: 1 t)

**Sealers**

- Single component UV protection sealer based on polyurethane offers very high UV resistance<sup>2</sup> Additional benefits: low in solvents, good solvent resistance levels, highly abrasion resistant, low odour pollution
- GETO Marocoat: two-component roller-grade sealer based on polyurethane and containing silica sand
- It is also possible to use the base compound GETO Marothaan as a sealer

**Colours**

- Clear
- Traffic blue similar to RAL 5017  
[The sealer can be coloured by mixing in a colour paste (350 g tin)]

<sup>1</sup> Depending on the type of application, the shade may lighten or darken; this generally has no effect on quality.

<sup>2</sup> Prolonged, continuous and intense sunshine may result in slight colour changes.

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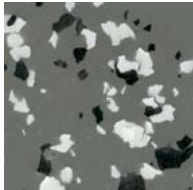




**V1 Smooth flow floor**

The flow floor is simply applied to a layer thickness of two millimetres.

In order to ensure optimum UV protection, the surface can subsequently be sealed using the UV Protective Sealer (clear or blue)



**V2 Colour chip flow floor**

The flow floor is strewn with colour chips (appr. 10 mm large) available in a wide variety of colours. The surface is sealed using the clear UV Protective Sealer to ensure optimum UV protection and to prevent contamination of the colour chips.

Layer thickness: 2 mm



**V3 Slip-proof flow floor with Mandurax<sup>1</sup>**

The flow floor is strewn with Mandurax (0.7–1.2 mm or 1.0–2.0 mm).

Advantage of this method: Very low rolling resistance, since the structure of the surface is similar to “emery paper”

Layer thicknesses: 3 and 4 mm



**V4 Slip-proof, abrasion-proof flow floor using Mandurax<sup>1</sup> and sealer**

As in Variant V3, the flow floor is strewn with Mandurax. After curing, the floor is also sealed using the UV Protective Sealer (clear or blue), or the GETO Marothaan base compound.

Advantage of this method: Extremely high abrasion resistance and, when using the UV Protective Sealer, optimum UV resistance thanks to the additional seal. In addition, it is easier to clean the floor since dirt particles are less likely to lodge in the Mandurax granulate.

Layer thicknesses: 3 and 4 mm



**V5 GETO Marocoat flow floor with a seal containing silica sand**

Apply the flow floor. After curing, the GETO Marocoat seal, which contains silica sand, is applied using a textured roller.

Here too, if required, we recommend then using our UV Protective Sealer to ensure a high level of UV resistance.

Layer thicknesses: 3 and 4 mm

<sup>1</sup> Mandurax is an aluoxide (colour: anthracite), which we can recommend and offer as a strewing material instead of silica sand, since it is much harder than silica sand and thus ensures a higher degree of abrasion resistance. Of course, silica sand can also be used.

83.01.01.4  
Floor covering system  
Polyurethane based  
**GETO®** Marothaan

**GETO Marothaan (A+B)**

Pack	Colour	Delivery form	Part No.
12.3 kg Standard	Concrete grey - similar to RAL 7023	Pail, compressed (A+B)	<b>830 200</b>
1.23 kg Patching	Concrete grey - similar to RAL 7023	Pail, compressed (A+B)	<b>830 203</b>

**Mandurax**

Grain size mm	Delivery form	Part No.
0.7 - 1.2 extra fine	25 kg sack	<b>830 210</b>
1.0 - 2.0 fine	25 kg sack	<b>830 211</b>

**Colour chips**

Pack g	Colour	Delivery form	Part No.
500	Maize yellow	Pail	<b>830 235 001</b>
500	Geranium red	Pail	<b>830 235 002</b>
500	English red	Pail	<b>830 235 003</b>
500	Royal blue	Pail	<b>830 235 004</b>
500	Dove blue	Pail	<b>830 235 005</b>
500	Water blue	Pail	<b>830 235 006</b>
500	Grass green	Pail	<b>830 235 007</b>
500	Grey	Pail	<b>830 235 008</b>
500	White	Pail	<b>830 235 009</b>
500	Black	Pail	<b>830 235 010</b>
500	Orange	Pail	<b>830 235 011</b>

**Sealer  
(polyurethane base) and colour paste  
for clear UV protective sealer**

	Delivery form	Part No.
GETO Marocoat (contains silica sand)	Component A 3.0 kg	<b>830 220</b>
	Component B 0.75 kg	<b>830 221</b>
Transparent UV Protective Sealer	2.5 kg tin	<b>830 222</b>
Colour paste, 'traffic blue' similar to RAL 5017	350 g tin	<b>830 223</b>
Bostik Solvent 250 (thinner for GETO Marothaan)	1000 ml tin	<b>830 420</b>

**Pre-treatment**

	Delivery form	Part No.
Simson Primer 209 (two-component)	Component A 5.0 kg	<b>830 215</b>
	Component B 1.17 kg	<b>830 216</b>
Simson Primer 60 D (single component)	5 l tin	<b>830 217</b>
GETO MSP Cleaner 1	1000 ml tin	<b>850 496</b>

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#### Pre-treatment products

Product	Coverage ml/m <sup>2</sup>
Simson Primer 209	250–300
Simson Primer 60 D	100–150
GETO MSP Cleaner 1	50

#### GETO Marothaan (A+B)

Layer thickness mm	Coverage kg/m <sup>2</sup>
1	1,5
2	3
3	4,5
4	6

#### Mandurax

Coverage kg/m <sup>2</sup>
Appr. 0.8–1.0 <sup>4</sup>

#### Colour chips

Coverage g/m <sup>2</sup>
Appr. 100

#### Sealer

Clear UV Protection <sup>1</sup> g/m <sup>2</sup>	Colour paste	GETO Marocoat (A+B) g/m <sup>2</sup>	Marothaan base compound (A+B) <sup>2</sup> g/m <sup>2</sup>
Appr. 100 <sup>3</sup>	350 g/2.5 kg	Appr. 500	Appr. 500

<sup>1</sup> Same coverage with colour paste mixed in

<sup>2</sup> Mixed GETO Marothaan should be thinned using Bostik Solvent 250 to facilitate easier roller application.

Mixing ratio: 1000 ml (= 6–8%) Bostik Solvent 250 is mixed into a stirred 12.3 kg pack of GETO Marothaan.

<sup>3</sup> Applies to smooth surfaces. When used to seal strewing materials, consumption will rise in accordance with the granulate size.

<sup>4</sup> This relates to effective consumption! Because some of the strewing material will not bind with the base material, assumed consumption may be up to 3.0 kg/m<sup>2</sup>, depending on the time and manner of strewing. Excess strewing material should be swept away once the floor is cured; this excess material can be re-used.

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**General information**

**As well as the working instructions below, please take note of the pre-treatment tables, workability and ventilation times on page 83.01.01.10!**

Thanks to the relatively long pot life, (approx. 55 minutes at 20 °C), GETO Marothaan can easily be applied manually. The long pot life is conditional on the **the pack being fully emptied after mixing Components A + B.**

**WATCHPOINT:** At extremely high temperatures, the material may quickly harden in the pail after mixing unless it is poured out immediately. The material in the pails generally warms up as soon as it is mixed and as long as it remains in the pail (natural chemical reaction)! The ambient and substrate temperature should be between +10 °C and +25 °C (20 °C is the optimal temperature). GETO Marothaan should not be exposed to direct light, since the UV radiation may result in discolouration. Therefore, we recommend also using our UV Protective Sealer.

**Please consult us in the event of extreme conditions of any kind!**

**Surface preparation**

1. Seal gaps or holes before coating, since these will otherwise be visible after coating. Small holes or areas of unevenness can be sealed using GETO PUR 21. Butts between panels, or intersections with other materials, can also be covered using fibreglass strips embedded in Simson Primer 209. Larger gaps should be filled with timber or a similar material. Details (edge angles etc.) made of steel or aluminium must be prepared in accordance with the pre-treatment table.
2. Surfaces must be clean, dry and free of grease, and must be fully sound. Loose or insufficiently sound layers and components must be removed mechanically.
3. Surfaces must be pre-treated in accordance with the pre-treatment table.  
If a primer is required, we recommend applying it with a varnish roller (solvent-resistant).
- 4. Important in the case of timber: The maximum timber moisture must not exceed 13%.**
5. The surface to be coated must be aligned horizontally.

**Mixing  
GETO Marothaan**

Place Components A and B in the pail and mix and stir well for around three minutes, using a drill with paddle mixer running at approx. 400 rpm.  
Ensure thorough mixing in the edge and base areas. Then pour the mixture directly onto the surface.

**WATCHPOINT:** "Pour" rather than "scrape" the pack empty to ensure that no un-mixed particles of Component A or B are applied to the surface. Such un-mixed particles would not cure, resulting in a defective coating.

If several packs are required, we recommend starting to mix the second batch while still applying the first batch.

## Mixing sealers

- GETO Marocoat  
See "Mixing GETO Marothaan"

- **UV Protective Sealing (and mixing in the colour paste)**

**Notes:** Protect the area to be sealed from direct sunshine. The floor temperature must not exceed 25°C! Protect curing material from direct sunshine and draughts.

Using a drill with paddle mixer, mix the sealer at appr. 400 rpm until obtaining a homogenous and uniform mixture. Then use a varnish roller to apply the sealer evenly, rolling in onto the surface cross-wise. The resulting overlaps should be minimised as much as possible.

**WATCHPOINT:** Uneven roller distribution of the material, or insufficient subsequent rolling, may result in stripes or areas of shading. Where possible, sealing should take place in one operation. If the sealing work is interrupted, delimit it by careful masking, removing the masking tape after a gelling period of around 1 hour. This will create a clean intermediate seam.

Once the sealer has been mixed, the colour paste can be mixed in if required. Empty the entire tin (350 g) of colour paste (stir briefly), together with the full pack of sealer (2.5 kg), into a clean vessel and stir again until obtaining a homogenous mixture.

- GETO Marothaan  
See "Mixing GETO Marothaan"

## Applying the individual variants

### V1 Smooth flow floor

Recommended layer thickness: 2 mm

Stir and apply GETO Marothaan as described (pour out).

Then spread evenly across the surface using a notched trowel (4/4 mm).

Immediately after laying the material, use a spiked roller to deaerate it in order to avoid blister formation (roll cross-wise). If working on larger areas, we recommend also using spiked shoes to facilitate deaeration of the entire area. Once the area is open to pedestrian traffic, a varnish roller can then be used to apply the UV Protective Sealer in order to achieve excellent UV resistance. See tables for workability times and material coverage figures.

### V2 Colour chip flow floor

Recommended layer thickness: 2 mm

The procedure is the same as the V1 version. After deaerating, the colour chips can be strewn in manually or with the aid of a strewing gun.

In order to achieve excellent UV resistance, as well as preventing soiling of the colour chips, we recommend using a varnish roller to seal the surface with the clear UV Protective Sealer. This should be done as soon as the floor is open to pedestrian traffic. See tables for workability times and material coverage figures.

### V3 Slip-proof flow floor with Mandurax

Recommended layer thickness: 3 and 4 mm

The procedure is the same as that for Variant V1, but a 6/6 mm notched trowel should be used. Following deaeration, and observance of the strewing times (see table), strew in the Mandurax manually or with the aid of a strewing gun. If necessary, strew with Mandurax again after ten minutes.

Then allow the floor to cure and sweep away any excess material.

See tables for workability times and material coverage figures.

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**Applying the individual variants**

(cont.)

**V4 Slip-proof, abrasion-proof flow floor using Mandurax and sealer**

Recommended layer thicknesses: 3 and 4 mm

The procedure is the same as that for Variant V3. After sweeping away the Mandurax, use a varnish roller to apply either the UV Protective Sealer or the base compound GETO Marothaan (diluted with Bostik Solvent 250, see "Material compounds" table). See tables for workability times and material coverage figures.

**V5 Marocoat - Flow floor with a seal containing silica sand**

Recommended layer thicknesses: 3 and 4 mm

The GETO Marothaan flow floor is applied in the same way as Variant V1. Once the silica sand seal has cured, mix GETO Marocoat Components A + B, stir (mixing process identical to GETO Marothaan), pour out, spread using a notched trowel, and then texturise using a yellow or white PE foam roller (it is also possible to dip the roller directly into the stirred mixture and then apply).

Once the GETO Marocoat has cured, a UV Protective Sealer can also be applied.

See tables for workability times and material coverage figures.

**Concluding work****Cleaning tools and hands**

Tools should be cleaned immediately using GETO MSP Cleaner 1.

Once hardened, the material can only be removed mechanically.

Wash hands and skin immediately using warm water and soap.

**Waste disposal**

- Hardened material:

Can generally be disposed of as domestic or commercial refuse in consultation with the appropriate local authorities.

- Liquid material:

Should be disposed of in accordance with the Waste Code Number in consultation with the appropriate local authorities.

Fully emptied packages can be disposed of via DSD, Interseroh or KBS.

**Protective measures**

During application, suitable and adequate protective workwear and gloves should be worn, together with an appropriate respiratory mask. The hardener component, in particular, should not be handled without protection. If the skin is splattered with Component A or B, wash immediately with soap and water. If the material comes into contact with the eyes, rinse immediately with plenty of water and consult a doctor. The safety data sheets, and the guidelines issued by the mutual indemnity associations regarding the treatment of polyurethanes and isocyanates, must always be observed. Avoid naked flames!

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## Surface preparation

Surfaces	Pre-treatment	Primer
New timber floors, uncoated (recommended: birch or beech plywood)	Remove dust using oil-free, water-free compressed air or a vacuum cleaner	Simson Primer 209
Old timber floors, uncoated	Remove contaminants by sanding etc.; then see "New timber floors"	Simson Primer 209
Timber, coated with phenol resin (screen printed floors)	Remove the coating until reaching bare wood; then see "New timber floors"	Simson Primer 209
Aluminium, stainless steel, galvanised steel	Sandblast or grind using an angle grinder, grain 60; then clean using GETO MSP Cleaner 1	Simson Primer 209
Polyester floors, fibreglass reinforced plastic	Sandblast or grind using an angle grinder, grain 60; then clean using GETO MSP Cleaner 1	Simson Primer 60 D
Steel, raw	Sandblast or grind using an angle grinder, grain 60; then clean using GETO MSP Cleaner 1	Simson Primer 209
Old PU flow floors	Sandblast or grind using an angle grinder, grain 60; then clean using GETO MSP Cleaner 1	Simson Primer 60 D
Concrete	Concrete must be dry and at least six months old. Mechanically remove the thin cement skin (white layer). Remove dust. Rising damp must be avoided in general.	Simson Primer 60 D
Varnish (single component/two-component)	We recommend sanding off varnish. As an alternative to sanding, Primer 209 has proven to be a suitable primer in practice. However, individual preliminary trials are necessary!	

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83.01.01.10  
Floor covering system  
Polyurethane based  
**GETO®** Marothaan

**Primer and cleaners**  
**Pot lifes + ventilation times**

Primer	Pot life <sup>1</sup> min	Further work possible after hrs (min/max) <sup>1</sup>
Simson 209 (two-component) <sup>2</sup>	55	6/18
Simson 60 D (single component)	Single component	1/18
GETO MSP Cleaner 1	Single component	10 min

<sup>1</sup> Figures refer to an ambient temperature of 20 °C

<sup>2</sup> Mix both components together using a drill and pan mixer.  
Mix for around three minutes at approx. 400 rpm.

**Flow floor workability times**  
**GETO Marothaan**

	Ambient temperature				
	10 °C	15 °C	20 °C	25 °C	30 °C
Workability time (pot life)	70 min	60 min	55 min	45 min	35 min
Open to pedestrian traffic after (hrs)	12 <sup>1</sup> / 11 <sup>2</sup>	9 <sup>1</sup> / 8,5 <sup>2</sup>	7 <sup>1</sup> / 6,5 <sup>2</sup>	5,5 <sup>1</sup> / 5,5 <sup>2</sup>	4 <sup>1</sup> / 3,5 <sup>2</sup>
Open to full mechanical stress after	Appr. 4 days	Appr. 3,5 days	Appr. 3 days	Appr. 2,5 days	Appr. 2 days

<sup>1</sup> At 45% relative humidity

<sup>2</sup> At 65% relative humidity

**Mandurax strewing times**  
**(in minutes)**

Relative humidity %	Ambient temperature				
	10 °C	15 °C	20 °C	25 °C	30 °C
35	240	210	150	120	75
45	240	180	150	120	75
55	240	180	120	90	75
65	210	150	120	90	75
75	210	150	120	90	75
85	210	150	120	90	60
95	210	150	120	90	60

**Sealer workability times**  
**GETO Marocoat**

	Ambient temperature				
	10 °C	15 °C	20 °C	25 °C	30 °C
Workability time (pot life)	70 min	60 min	55 min	45 min	35 min
Open to pedestrian traffic after (hrs)	12 <sup>1</sup> / 11 <sup>2</sup>	9 <sup>1</sup> / 8,5 <sup>2</sup>	7 <sup>1</sup> / 6,5 <sup>2</sup>	5,5 <sup>1</sup> / 5,5 <sup>2</sup>	4 <sup>1</sup> / 3,5 <sup>2</sup>
Open to full mechanical stress after	Appr. 4 days	Appr. 3,5 days	Appr. 3 days	Appr. 2,5 days	Appr. 2 days

<sup>1</sup> At 45% relative humidity

<sup>2</sup> At 65% relative humidity

**UV Protective Sealer**

	Ambient temperature		
	10 °C	20 °C	30 °C
Open to pedestrian traffic after (hrs)	36	24	16
Open to full mechanical stress after	Appr. 4 days	Appr. 3 days	Appr. 2 days

**GETO Marothaan base compound**  
**as sealer**

See table above "GETO Marothaan flow floors: workability times"

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## Tools

	Part No.
<b>Strewing gun</b> (fine and rough sand)	<b>840 086</b>
<b>Strewing gun</b> (colour chips, fine and rough sand)	<b>840 087</b>
<b>Varnish roller</b>	<b>840 088</b>
<b>Notched trowel</b> (4 mm toothing)	<b>840 095</b>
<b>Notched trowel</b> (6 mm toothing)	<b>840 085</b>
<b>Spiked roller</b>	<b>840 096</b>
<b>Spiked shoes</b> (1 pair)	<b>840 092</b>
<b>Stirrer</b> (mixer)	<b>840 094</b>

## Technical data

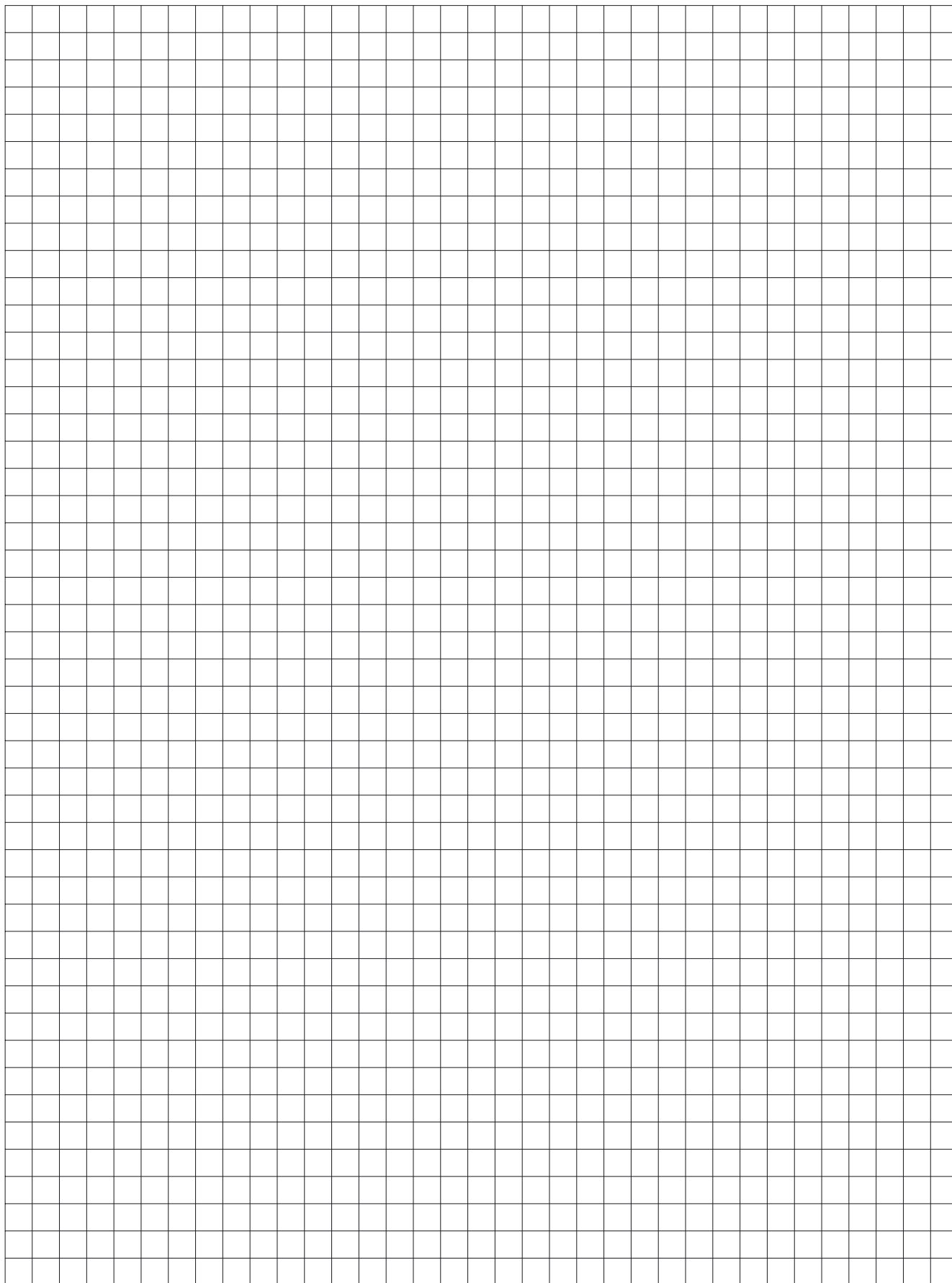
	A Component	B Component
<b>Basis</b>	Polyhydric alcohol	MDI
<b>Composition</b>	Liquid	Liquid
<b>Viscosity</b>	16000 ± 1500 mPas	150 mPas
<b>Density</b>	1.64 g/cm <sup>3</sup>	1.20 g/cm <sup>3</sup>
<b>Colour</b>	Grey	Honey
<b>Basis</b>	Polyurethane	
<b>Composition</b>	Liquid	
<b>Viscosity of the mixture</b>	4500 ± 500 mPas	
<b>Density of the mixture</b>	1.54 g/cm <sup>3</sup>	

<b>Mixing ratio A:B</b>	100 : 22,5	Parts by weight
	100 : 31	Parts by volume
<b>Pot life</b>	55 min	At 100 g, 20 °C, R.H. 55%
<b>Curing time</b>	7 hrs	Open to pedestrian traffic
	48 hrs	Open to full stress
<b>Hardness Shore A</b>	98	DIN 53505
<b>Hardness Shore D</b>	70	DIN 53505
<b>Maximum tensile strength<sup>1</sup></b>	14 N/mm <sup>2</sup>	DIN 53504
<b>Expansion at maximum tensile strength<sup>1</sup></b>	20% DIN	DIN 53504
<b>Tensile strength at fracture<sup>1</sup></b>	13 N/mm <sup>2</sup>	DIN 53504
<b>Breaking strain<sup>1</sup></b>	50%	DIN 53504
<b>Tear resistance</b>	65 N/mm	DIN 53515
<b>Young Module</b>	70 N/mm <sup>2</sup>	—
<b>Solvent content</b>	0%	—
<b>Heat resistance<sup>1</sup></b>	-40 °C to +90 °C	—

<sup>1</sup> Once fully cured at 20 °C, 55% relative humidity

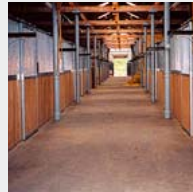
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83.01.01.12  
Floor covering system  
Polyurethane based  
**GETO®** Marothaan

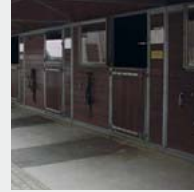




GETO Horsefloor  
in stables



GETO Horsefloor



GETO Horsefloor in  
vehicle manufacturing



GETO Horsefloor

## Brief description: Natural rubber floor covering

GETO Horsefloor is a solvent-free elastic three-component rubber floor screed based on natural materials. This floor coating was developed specifically for horses and other hoofed animals. When transporting the animals, hygiene, sure-footedness and comfort when standing are particularly important. Significant user benefits include very quick and easy application, as well as the ease of repair which reduces costs. The total absence of chemical additives offers particular benefits for both animals and users, especially when compared with typical rubber mat bonding.

### Benefits for the horse

- Slip-proof, elastic, protects equine joints
- No chemical additives
- Jointless, reduced risk of injury
- Hygienic, easy to clean

### High quality

- Purely natural product
- Jointless and dense; no longer any risk of soiling beneath the floor cover
- Very tough
- Impervious to ammonia, disinfection agents, high pressure cleaners



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## 83.02.01.2

### Floor covering system

#### Natural rubber based

#### **GETO®** Horsefloor

##### **Areas of application and references**

- Years of successful international use
- Equine transport vehicles, horse loading ramps
- Horse boxes, stables, solariums
- Veterinary clinics, animal shelters
- Washing boxes, deck stations



##### **Working benefits**

- Quick and easy to lay
- No chemical additives
- Solvent free
- Quickly and easily repaired
- No loss of material
- Curves and corners easily coated
- Variable choice of layer thicknesses
- Self-adhesive substrate bonding



##### **Technical data**

- Colours: dark brown and black
- Layer thickness approx. 15 mm
- See following page for packaging and coverage
- Bonds to timber; other surfaces must be appropriately pre-treated
- Open to full stress after 3-4 days



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## Packaging form, coverage, application tools

### GETO Horsefloor – basic kit

A pack includes one of each of the following:

- 20 kg pail of natural rubber
- 8.5 kg pail of hardener
- 20 kg sack of rubber granulate

Dark brown: **Part No. 830 160**

Black: **Part No. 830 162**

Yield per pack:

Layer thickness 20 mm = approx. 2.20 m<sup>2</sup>

Layer thickness 15 mm = approx. 3.00 m<sup>2</sup>

Layer thickness 12 mm = approx. 3.75 m<sup>2</sup>

### GETO Horsefloor – repair kit

A pack consisting of one: Pail with all three components

Dark brown: **Part No. 830 161**

Black: **Part No. 830 163**

Yield per pack:

Layer thickness 15 mm = approx. 1.0 m<sup>2</sup>

Layer thickness 12 mm = approx. 1.25 m<sup>2</sup>

Stainless steel smoothing trowel: **Part No. 840 091**

Spiked roller: **Part No. 840 096**

Stirrer (mixer): **Part No. 840 070**

### Other equipment required:

- One plastic mixing vessel (at least 90 litres)
- One shovel
- One water pail

### Pre-treatment products for aluminium and steel

Synthetic resin roller: **Part No. 840 088**

Colma Cleaner, 1 litre tin: **Part No. 830 038**

Colma Cleaner, 5 litre tin: **Part No. 830 039**

SikaTrocral C705 contact adhesive, 1.7 kg tin: **Part No. 830 165**

(one tin is sufficient for a pack of GETO Horsefloor)

### Technical data

Material weight	Approx. 16 kg/m <sup>2</sup> in the case of a 15 mm floor covering
Bonding surface	Timber; concrete; raw steel; tiles
Application temperatures	Surface temperature at least 5 °C Ambient temperature at least 10 °C
Storage	Avoid sunshine, heat and frost Store in cool and dry conditions at 1–30 °C
Shelf-life	6 months

*All measurements, weights and colours are merely indicative and are not binding.*

### Recommended covering thicknesses and utility surfaces per pack in m<sup>2</sup>

	Covering thickness			Utility surface Appr. m <sup>2</sup>
	12 mm	15 mm	20 mm	
Horse boxes		•		3.0
Stables		•		3.0
Training circles			•	2.0
Trailers		•		3.0
Deck stations			•	2.0
Veterinary clinics		•	•	2.0–3.0
Washing boxes			•	2.0
Solariums			•	2.0
Wall surfaces	•			4.5

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## Working instructions

Surface preparation  
free (general)

Lasting durability of GETO Horsefloor is primarily conditional on a clean coating surface. All substrates must be free of oil, grease, acid, adhesives or resins. Coated screen-printed panels must be sanded down. Please consult us regarding the pre-treatment of concrete, composite stone cobbles, brick or tiles. Concrete floors must be cleaned using a high-pressure cleaner with a dirt milling attachment; clean into the pores. In the case of newly concreted surfaces, the concrete must be allowed to set for between six and eight weeks before pre-treating and coating the substrate. Optimum surface: Timber, raw **(before coating dampen slightly using a cloth moistened with water, in order to improve the timber absorbency).**

**IMPORTANT: An absolutely clean and stable substrate without any deformation is vital!**

Pre-treating aluminium  
and steel

1. Vacuum the surface to be coated.
  2. Apply Silka Colma Cleaner to an undyed household cloth, and clean the surface thoroughly. Any accidentally spilt cleaning agent must be immediately mopped up with the cloth.
  3. Allow the cleaner to dry fully (at least 30 minutes depending on temperature – the surface must be dry).
  4. Using a roller, apply a thin even layer (maximum one millimetre) of Silka Trocal C705 contact adhesive to the absolutely dry, grease-free and oil-free surface.
  5. Allow the adhesive layer to dry well (touch test – the adhesive layer should no longer form strings, maximum drying time 24 hours).
- Sika Trocal C705 contact adhesive coverage, depending on substrate roughness = 350–550 g/m<sup>2</sup>.
  - One 1.7 kg tin will suffice for approx. 3–4 m<sup>2</sup> (or for one pack of GETO Horsefloor).

Mixing

1. Pour the natural rubber into a clean mixing vessel (90 l) and stir thoroughly (if using a black coating, ensure that the black colour additive is homogeneously distributed throughout the substance).
  2. Quickly strew the hardener powder (within one minute) into the vessel while stirring constantly.
  3. Add all the rubber granulate and mix all three components together until the material is clearly a homogenous substance.
- Because of the hardening process, the entire mixing procedure should not take any longer than three or four minutes. The work should always be executed by at least two people.

Application

- Using a shovel, apply the mixture to the furthest corner, spread using a smoothing trowel, and then roll a spiked roller cross-ways very lightly (the roller's own weight will suffice). This allows the required surface structure (ranging from smooth to rough-grained) to be determined individually. The more thoroughly the spiked roller is used, the smoother the surface. A layer thickness of approx. 15 mm should be maintained under all circumstances; thickness can be tested by inserting a yardstick into the freshly smoothed layer.
- In order to avoid the formation of unattractive seams, work should be continued without interruption where possible.
- We recommend wearing rubber gloves.

WATCHPOINTS

- Depending on ambient temperature, the floor can withstand full stress in between three and five days.
- Depending on temperature, the mixture must be applied within a maximum of 30 minutes after mixing.
- Clean tools with clear water.
- If possible, the material should be used within six months. Protect from frost and damp.
- Horse-trailers should be horizontally aligned. After coating, they should not be moved during the curing period (between three and five days).
- GETO Horsefloor is not suitable for mechanical stress such as that caused by elevating trucks or forklifts.
- Not suitable for pig transport vehicles.
- For the sake of the animals, GETO Horsefloor does not use any chemical additives. Therefore, depending on dampness or residual dampness of the substrate, lime efflorescence may arise immediately after curing. These can be removed using commercially available salt/water solutions.
- Do not walk on GETO Horsefloor for 48 hours after coating. Do not expose to loads for 72 hours. Avoid contact with water and direct sunshine for one week.
- On principle, we recommend filing the batch number.
- If exposed to heavy UV radiation, GETO Horsefloor can only be used in circumstances of low mechanical stress since the surface hardness of the covering will be reduced.

**GETO Horsefloor should not be exposed to constant UV radiation.**



1. Mask the side walls



2. Pre-treat the surface



3. Pour the natural rubber into the mixing vessel



4. Squeeze out the bag fully



5. Quickly mix in the hardening powder while constantly stirring



6. Add all the rubber granulate while constantly stirring ...



7. ...and mix until obtaining a homogenous substance



8. Apply the mixture using a shovel and spread immediately



83.02.01.6

Floor covering system

Natural rubber based

**GETO®** Horsefloor



9. Spread evenly and smooth out any bumps



10. Using the spiked roller, lightly roll over cross-ways  
(do not apply pressure; the roller's own weight is sufficient)



11. GETO Horsefloor can be brought directly up to the side walls



12. Work quickly from the front to the back, working layer-by-layer



13. Allow to feather slightly at the rear



14. Allow the floor to cure for three to five days

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Simple processing



Optimal bonding through  
correct pre-treatment



Clean and fast



Short flash-off times  
Thorough cleaning



GETO PUR Cleaner 1

## Brief description

### Description

### Bonding cleaner PUR

Bonding cleaner for non-absorbent substrates that will be bonded/sealed with GETO PUR products. GETO PUR Cleaner 1 effectively cleans the substrate and in the process leaves bonding-active substances behind which support sealing/bonding.

**GETO<sup>®</sup> PUR Cleaner 1 contains alcohol.**

### Surfaces

- Various metals, various plastics
- Raw steel, galvanized steel, painted, primed
- Stainless steel
- Aluminum, polished, anodized
- GFRP
- ABS
- PMMA, PC
- Hard PVC
- Glass

**In this regard please refer to our “Pre-treatment table for GETO products”.  
For surfaces not listed here contact us.**

### Processing

Dampen a clean, lint-free cloth or paper fleece with GETO PUR Cleaner 1 and clean substrates thoroughly. Cleaning several times may be necessary depending on the degree of dirt; turn the cloth/fleece several times in the process. Then let surfaces flash-off for 5 minutes, then start application of the sealant/adhesive. To keep the surfaces free of subsequent particles from the ambient air, a flash-off time of 7 hours should not be exceeded. Depending on the surface an additional fine rub-down may be effective. In this case the work steps would be: clean, rub-down, clean.

### Delivery

1000 ml tin, colour brown transparent **Part No. 850 190**  
5000 ml tin, colour brown transparent **Part No. 850 191**

### Material Specifications

Base	Polymer resin, solvent containing
Colour	transparent brown
Consistency	thin liquid
Density	0.80 g/cm <sup>3</sup>
Flash-off time	at least 5 min./max. 7 hours
Usage	approx. value 20-40 g/m <sup>2</sup> depending upon the degree of soiling
Shelf life	12 months, unopened in original packing
Working temperature	+10 °C to +35 °C
Storage temperature	+5 °C to +25 °C
Transport designation	UN 1219

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84.01.01.2  
Preparation  
1-part polyurethane  
**GETO®** PUR Cleaner 1





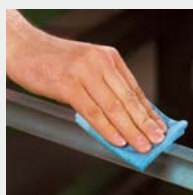
Can also be used as  
smoothing agent for  
**GETO<sup>®</sup> PUR**



Simple processing



Optimal bonding through  
correct pre-treatment



Clean and quick



Short flash-off times  
Thorough cleaning



GETO PUR Cleaner 2

## Brief description

### Description

### Cleaner PUR

Cleaner for non-absorbent surfaces that will be bonded with GETO PUR products. GETO PUR Cleaner 2 effectively cleans the substrate. Particularly suitable for GFRP and powder coated surfaces. GETO PUR Cleaner 2 can also be used as smoother for GETO PUR, as it is alcohol free.

### Surfaces

- Various metals, various plastics
- Raw steel, galvanized steel, painted, primed
- Stainless steel
- Aluminum, polished, anodized
- GFRP
- ABS
- PMMA, PC
- Hard PVC
- Glass

**In this regard please refer to our “Pre-treatment table for GETO products”. For surfaces not listed here contact us.**

### Processing

Well moisten a clean, lint-free cloth or paper fleece with GETO PUR Cleaner 1 and clean surfaces thoroughly. Cleaning several times may be necessary depending on the degree of soiling; turn the cloth/fleece several times in the process. Then let surfaces flash-off for at least 5 minutes and start application of the sealant/adhesive. To keep the surfaces free of subsequent particles from the ambient air, a flash-off time of 7 hours should not be exceeded. Depending on the surface an additional fine abrading is recommended. Process sequence then would be: clean, abrade, clean.

### Delivery

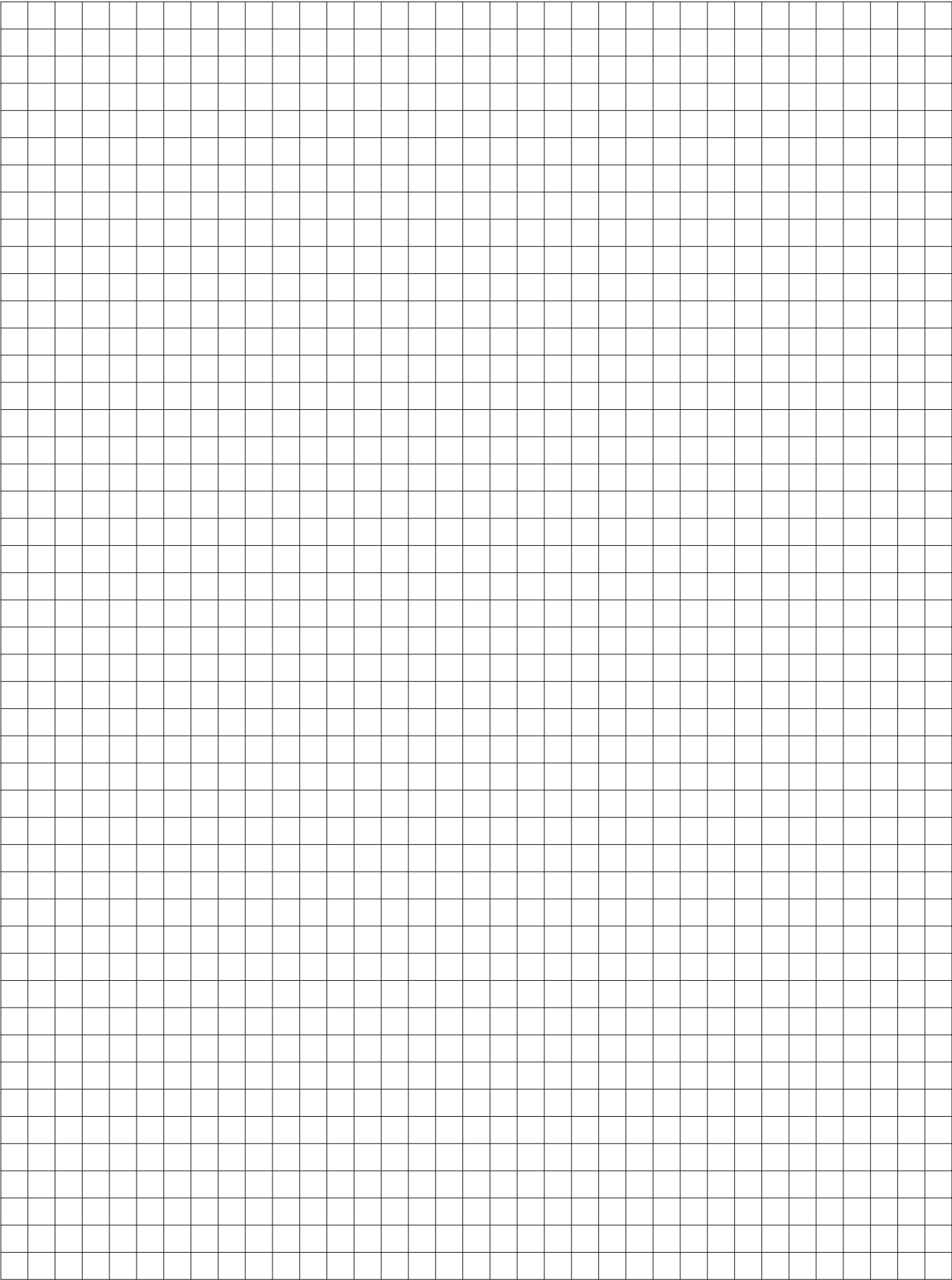
1000 ml tin, colour transparent: **Part No. 850 192**

### Material Specifications

Base	Benzene mixture
Colour	transparent
Consistency	thin flowing
Density	0.8 kg/l
Flash-off time	at least 5 minutes/7 hrs max.
Usage	guide value app. 50 g/m <sup>2</sup> depending upon the degree of soiling
Shelf life	12 months, unopened in original packing
Working temperature	+10 °C to +35 °C
Storage temperature	+5 °C to +25 °C
Transport Code	UN 3295

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84.01.02.2  
Preparation  
1-part polyurethane  
**GETO®** PUR Cleaner 2





Körabond HG 77

## Brief description

### Körabond HG 77

## Description

Primer for pre-treating rigid PVC, ABS and coated metals

## Surfaces

- ABS
- Rigid PVC
- Coated metals

## Flash-off time/usage

At least 30 minutes / max. 24 hours / approx. 20-80 g/m<sup>2</sup>

## Delivery

1000 ml pack: **Part No. 870 822 000**

## Application/processing

### Work preparation

The surfaces being treated must be dry, clean and free of grease. Apply a thin layer of Körabond HG 77 to the surfaces being primed; working temperature 10 °C to 25 °C.

### Application

Apply Körabond HG 77 using paper fleece. The period between primer application and bonding should be between 30 minutes and 24 hours. When treating in advance of GETO PUR 2090, the period between primer application and bonding should not exceed 1 hour.

## Material Specifications

Base	synthetic resin, contains solvents
Colour	colourless, slightly yellowish, clear
Consistence	low viscosity consistency

## Storage

Do not store for longer than 12 months at temperatures not below 10 °C.

## Safety

### Labelling obligation

Please consult the current safety data sheet.

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84.01.03.2  
Preparation  
1-part and 2-part polyurethane  
**Körabond HG 77**



**Pre-treatment table for structural bonding using GETO PUR single component adhesives**

Surface	Pre-treatment	Remarks
<b>ABS</b>	GETO PUR Cleaner 1	Primer HG 77 may be required
<b>Aluminium, blank</b>	GETO PUR Cleaner 1 (2x)	and fine abrading <sup>1</sup>
<b>Aluminium, anodised</b>	GETO PUR Cleaner 1 (2x)	and fine abrading <sup>1</sup>
<b>Aluminium, powdered</b>	GETO PUR Cleaner 1, followed by GETO PUR Cleaner 2	
<b>Stainless steel</b>	GETO PUR Cleaner 1 (2x)	and fine abrading <sup>1</sup>
<b>Fibreglass reinforced plastic, smooth side</b>	GETO PUR Cleaner 2, followed by GETO PUR Cleaner 1	
<b>Fibreglass reinforced plastic, rough side</b>	GETO PUR Cleaner 2, followed by GETO PUR Cleaner 1	
<b>Glass, clear</b>	GETO PUR Cleaner 1	protect against UV trail radiation
<b>Glass, with ceramic coating</b>	GETO PUR Cleaner 1	
<b>Timber, raw</b>		Primer HG 74 E <sup>2</sup>
<b>Timber, coated with phenol resin</b>	GETO PUR Cleaner 1 (2x)	abrading necessary, then treat as timber, raw
<b>PMMA (Plexiglass)</b>	GETO PUR Cleaner 1 (2x)	fine abrading <sup>1</sup> , pre-treatment necessary
<b>Steel, raw</b>	GETO PUR Cleaner 1	
<b>Steel, varnished</b>	GETO PUR Cleaner 1	
<b>Steel, galvanized</b>	GETO PUR Cleaner 1	abrading necessary <sup>1</sup>

Flash-off time (min/max) <sup>3</sup>	Application quantity
GETO PUR Cleaner 1	5 min/7 hrs
GETO PUR Cleaner 2	5 min/7 hrs
Primer HG 77	10 min/3 days
Primer HG 74 E	1 hour/1 day

<sup>1</sup> Pre-treatment: Clean, abrade, clean. We recommend abrasive paper K 1000 for abrading purposes.

<sup>2</sup> It is sufficient to wipe down the wood with a slightly damp cloth, as long as the timber moisture is **guaranteed** not to exceed 13%. If this can not be guaranteed, we generally recommend using Primer HG 74 E. In general, Primer HG 74 E improves timber bonding attributes.

<sup>3</sup> If the flash-off time is exceeded, the pre-treatment must be repeated before bonding.

**Before application, the detailed data sheets for the various pre-treatment products should be noted!**

Universally applicable: for satisfactory adhesion, the substrate must be clean, free of oil and grease as well as free of separator materials. We would therefore point out that the above information is based on our experience to date in practice and must be confirmed by individual trials. Liability or guarantees cannot be inferred from these instructions. For subsequent varnishing, our data sheets and the varnish manufacturers' recommendations must be observed.

GETO PUR Cleaner 1, 1000 ml tin, **Part No. 850 190**

GETO PUR Cleaner 1, 5000 ml tin, **Part No. 850 191**

GETO PUR Cleaner 2, 1000 ml tin, **Part No. 850 192**

Primer HG 77, 1000 ml tin, **Part No. 870 822**

Primer HG 74 E, 1000 ml tin, **Part No. 870 821**

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84.01.04.2

## Preparation

1-part polyurethane

### Pre-treatment table

[illegible]





Körapox BS 85

## Brief description

## Primer for two-component polyurethane

### Description

Two-component primer for pre-treating aluminium, iron, galvanised steel and chromium steel surfaces.

Solely for bonding with two-component Körapur adhesives

### Surfaces

- Aluminium
- Iron
- Steel, galvanised
- Steel, chrome-plated

### Flash-off time/usage

Minimum 4 hrs/maximum 72 hrs/approx. 200 g/m<sup>2</sup>

### Delivery

Pack	Part No.
5 kg pack Components A + B (4+1 KG)	<b>830 132</b>

## Application/processing

### Work preparation

Surfaces must be dry, clean and free of dust and grease. Sand lightly before priming.

Do not use at temperatures below 15 °C. The primer must be used within the pot life. Using a mixer, mix the primer mixture (A+B) thoroughly (at approx. 400 rpm), and then decant into another clean vessel and mix again.

### Application

Using a varnish roller, apply Körapox BS 85 evenly. Bonding should take place no more than 72 hours, and no less than four hours, after the primer application.

## Material Specifications

Basis	Epoxy resin, two-component, contains solvents
Colour	grey
Mixing ratio	4 : 1 parts by volume
Pot life	approx. 8 hours at 20 °C

## Storage

Do not store for longer than 12 months at temperatures not below 10 °C.

## Safety

### Labelling obligation

Please consult the current safety data sheet.

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84.02.01.2  
Preparation  
2-part polyurethane  
**Körapox BS 85**





Körabond HG 79

## Brief description

## Körabond HG 79

### Description

Primer for pre-treating aluminium and non-absorbent substrates

### Surfaces

- Aluminium
- Steel
- Stainless steel
- Brass
- Copper
- Zinc
- Tin plate

### Flash-off time/usage

At least 30 minutes / max. 24 hours / approx. 20 – 80 g/m<sup>2</sup>

### Delivery

500 g pack: **Part No. 870 825 000**

### Application/processing

#### Work preparation

Clean using GETO PUR Cleaner 1. Sand down roughly and prime using Körabond HG 79, working temperature between 10 °C and 35 °C.

#### Application

Apply HG 79 using paper fleece. The period between primer application and bonding should be between 30 minutes and 24 hours.

### Material Specifications

Base	synthetic resin, contains solvents
Colour	colourless, slightly yellowish
Consistence	low viscosity consistency

### Storage

Do not store for longer than 12 months at temperatures not below 10 °C.

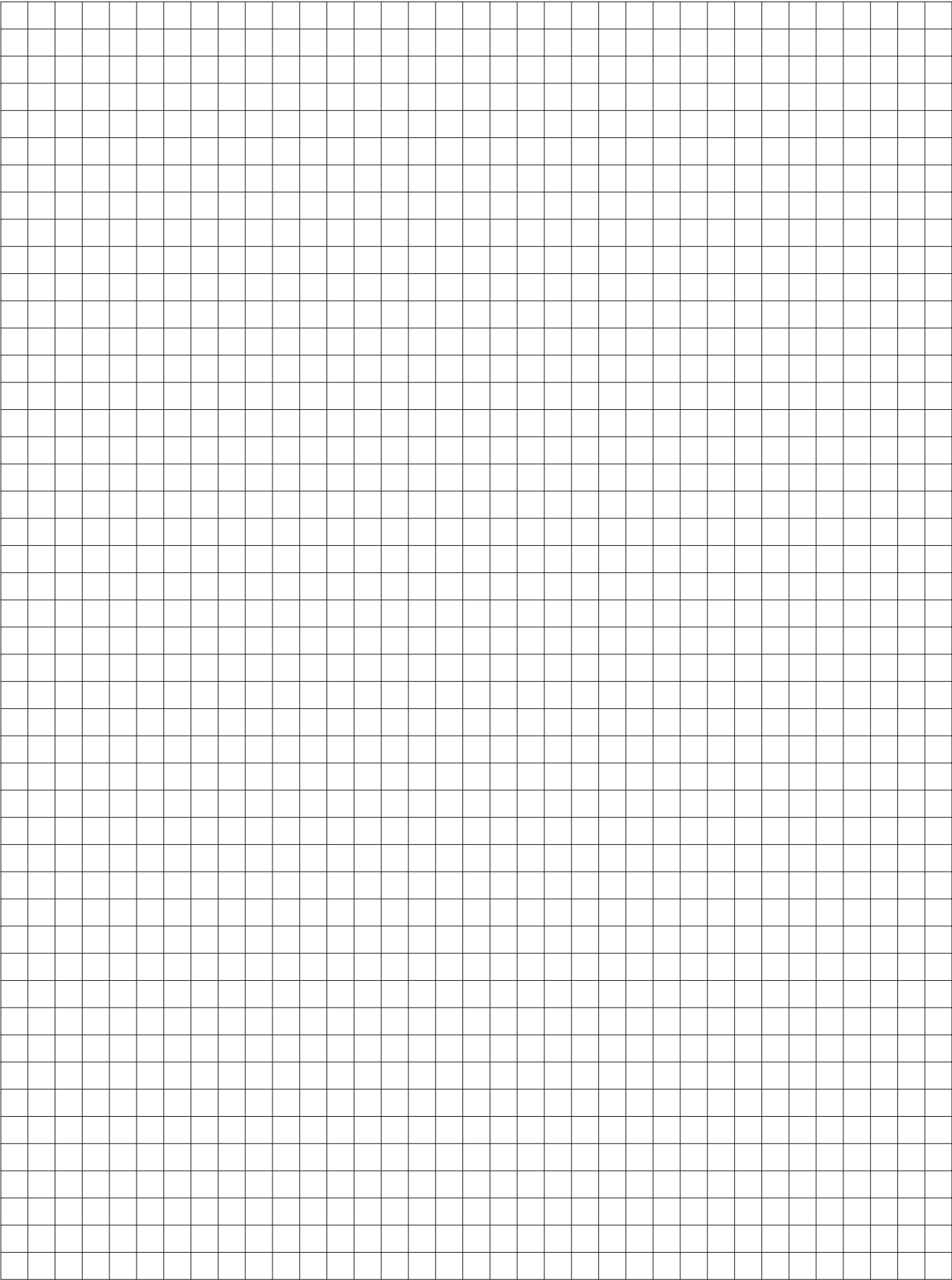
### Safety

Please consult the current safety data sheet.

### Labelling obligation

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84.02.02.2  
Preparation  
2-part polyurethane  
**Körabond HG 79**



**Pre-treatment table for structural bonding using Körapur two-component and GETO PUR two-component adhesives**

Surfaces	Pre-treatment
<b>Aluminium</b>	
• Raw <sup>1</sup>	degrease using GETO PUR Cleaner 2 <sup>4</sup> , abrade, prime with Körapox BS 853
• chrome-plated	degrease using GETO PUR Cleaner 2 <sup>4</sup>
• Anodised	cannot be bonded using two-component PU
• Powdered	clean using GETO PUR Cleaner 2 <sup>4</sup> (refresh with Scotch-Pad if necessary)
• Primed	clean using GETO PUR Cleaner 2 <sup>4</sup> or Körasolv CR (refresh with Scotch-Pad if necessary)
• Varnished	clean using GETO PUR Cleaner 2 <sup>4</sup> or Körasolv CR (refresh with Scotch-Pad if necessary)
<b>Duromere</b>	
• Fibreglass reinforced plastic, sheeting	abrade, remove dust
• Fibreglass reinforced plastic, stripware	clean using GETO PUR Cleaner 2 <sup>4</sup> , abrade well, remove dust
• Plywood	abrade, remove dust
<b>Iron</b>	
• Raw	degrease using GETO PUR Cleaner 2 <sup>4</sup> , abrade
• Chrome-plated	degrease using GETO PUR Cleaner 2 <sup>4</sup>
• Galvanised	degrease using GETO PUR Cleaner 2 <sup>4</sup> , refresh with Scotch-Pad
• Primed	degrease using GETO PUR Cleaner 2 <sup>4</sup> , refresh with Scotch-Pad
• Varnished	degrease using GETO PUR Cleaner 2 <sup>4</sup> , refresh with Scotch-Pad
• Coated	clean using Körasolv PR
<b>High-resistance foam</b>	
• PS (polystyrene)	no pre-treatment required
• PUR/PIR	no pre-treatment required
• PVC	no pre-treatment required
<b>Timber</b>	
• Raw	timber moisture must not exceed 13%, no pre-treatment
• Phenol-coated	abrade, then proceed as for raw timber
<b>Thermoplastics</b>	
• ABS	prime using Körabond HG 77 <sup>5</sup>
• PVC	prime using Körabond HG 77 <sup>5</sup>
• PS, impact-resistant	cannot be bonded using two-component PU
• PP/PE	cannot be bonded using two-component PU
• PMMA (Plexiglass)	cannot be bonded using two-component PU
• PA (nylon)	abrade <sup>2</sup>
<b>VA steel<sup>1</sup></b>	for priming (grey, hot epoxy resin primer, see below)

<sup>1</sup> The optimum procedure is to have primed using a hot stoved epoxy resin primer (Pechiney process)

<sup>2</sup> Carry out preliminary trials, since PA can sometimes not be bonded

<sup>3</sup> Coverage: approx. 200 g/m<sup>2</sup>. Flash-off time: Minimum 4 hrs, maximum 72 hrs (5 kg, **Part No. 830 132**)

<sup>4</sup> PUR Cleaner 2, 1000 ml, **Part No. 850 192**
<sup>5</sup> Körabond HG 77, 1000 ml, **Part No. 870 822**

Universally applicable: for satisfactory adhesion, the substrate must be clean, free of oil and grease as well as free of separator materials. We would therefore point out that the above information is based on our experience in practice and must be confirmed by individual trials. Liability or guarantees cannot be inferred from these instructions.

For subsequent varnishing, our data sheets and the varnish manufacturers' recommendations must be observed.

**Before application, the detailed data sheets for the various pre-treatment products should be noted!**

84.02.03.2

## Preparation

2-part polyurethane

### Pre-treatment table

This image shows a full page of blank graph paper. The grid consists of small, equal-sized squares formed by thin, dark gray lines. There are no margins, text, or other markings on the page. The grid covers the entire area from edge to edge.



Simple processing



Optimum adhesion with correct pre-treatment



Clean and quick



Short flash-off times



GETO MSP Cleaner 1

## Brief description

### Description

### Adhesive cleaner MSP

Adhesive cleaner for non-porous surfaces which are to be bonded/sealed with GETO MSP. GETO MSP Cleaner 1 effectively cleans the surface and leaves active residues behind, which improve adhesion/sealing qualities.

### Surfaces

- Various metals, various synthetic materials
- Untreated, galvanized, painted, primed steel
- Stainless steel
- Aluminium, untreated, eloxized, anodized
- GFK
- ABS
- PMMA, PC
- PVC, hard
- Glass

**Take note of our “Pre-treatment Tables for GETO MSP”.  
For surfaces not listed here please contact us.**

### Processing

Well moisten a clean cloth or paper fleece with GETO MSP Cleaner 1 and clean surfaces thoroughly. Cleaning several times may be necessary depending on the degree of soiling; turn the cloth/fleece several times in the process. Then let surfaces flash-off for at least 10 minutes and start application of the sealant/adhesive. To keep the surfaces free of subsequent particles from the ambient air, a flash-off time of one hour should not be exceeded. Depending on the surface an additional fine abrading is recommended. Process sequence then would be: clean, abrade, clean.

### Delivery

1000 ml tin, colour transparent: **Part No. 850 496**

### Material Specifications

Base	siloxane
Colour	transparent
Consistency	thin liquid
Density	0.82 g/cm <sup>3</sup>
Flash-off time	minimum 10 minutes
Usage	approx. 50 g/m <sup>2</sup> depending upon the degree of soiling
Shelf life	12 months, unopened in original packing
Working temperature	+5 °C to +35 °C
Storage temperature	+5 °C to +25 °C

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84.03.01.2  
Preparation  
1-part MS Polymer  
**GETO®** MSP-Cleaner 1







Simple processing



Optimum adhesion with correct pre-treatment



Clean and quick



Short flash-off time



GETO MSP Cleaner 2

## Brief description

### Description

### Adhesive cleaner MSP

Adhesive cleaner for non-porous surfaces which are to be glued with GETO MSP. GETO MSP Cleaner 2 effectively cleans the surface and leaves active residues behind, which improve adhesion/sealing qualities. On account of its greater proportion of active adhesive substances in comparison with GETO MSP Cleaner 1, this is used for so-called difficult surfaces (e.g. powder coatings, ABS) and glued joints, which are to be subjected to large thermal and moisture stresses. The GETO MSP Cleaner 2, however, can be used for standard surfaces also.

### Surfaces

- Various metals, various synthetic materials
- Untreated, galvanized, painted, primed steel
- Stainless steel
- Aluminium, untreated, eloxized, anodized, powder coated
- GFK
- ABS
- PMMA, PC
- PVC, hard
- Glass
- Silk screen boards

**Take note of our “Pre-treatment Tables for GETO MSP”.  
For surfaces not listed here please contact us.**

### Processing

Well moisten a clean cloth or paper fleece with GETO MSP Cleaner 2 and clean surfaces thoroughly. Cleaning several times may be necessary depending on the degree of soiling; turn the cloth/fleece several times in the process. Then let surfaces flash-off for at least 10 minutes and start application of the sealant/adhesive. To keep the surfaces free of subsequent particles from the ambient air, a flash-off time of one hour should not be exceeded. Depending on the surface an additional fine abrading is recommended. Process sequence then would be: clean, abrade, clean.

### IMPORTANT

**Because of its incompatibility with paint systems, GETO MSP Cleaner 2 should not be used on areas which are to be subsequently painted. Therefore only use in the region to be glued.**

### Delivery

500 ml tin, colour transparent: **Part No. 850 497**

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84.03.02.2  
Preparation  
1-part MS Polymer  
**GETO®** MSP Cleaner 2

**Material Specifications**

Base	siloxane modified polymers
Colour	transparent
Consistency	thin liquid
Density	0.76 g/cm <sup>3</sup>
Flash-off time	minimum 10 minutes
Usage	approx. 50 g/m <sup>2</sup> depending upon the degree of soiling
Shelf life	9 months, unopened in original packing
Working temperature	+5 °C to +35 °C
Storage temperature	+5 °C to +25 °C
Transport labelling	UN 1263

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**Pre-treatment table for constructional gluing with GETO MSP**

Surface	Pre-treatment	Remarks
<b>ABS</b>	GETO MSP Cleaner 2	enquire, pre-trial essential
<b>Aluminium, blank</b>	GETO MSP Cleaner 1 or 2	and fine abrading <sup>1</sup>
<b>Aluminium, anodised</b>	GETO MSP Cleaner 1 or 2	
<b>Aluminium, powdered</b>	GETO MSP Cleaner 2	
<b>Stainless steel</b>	GETO MSP Cleaner 2	and fine abrading <sup>1</sup>
<b>GFK, smooth side</b>	GETO MSP Cleaner 2	and fine abrading <sup>1</sup>
<b>GFK, rough side</b>	GETO MSP Cleaner 1 or 2	and fine abrading <sup>1</sup>
<b>Glass, clear</b>	GETO MSP Cleaner 1	protect against UV trail radiation
<b>Glass, with ceramic coating</b>	GETO MSP Cleaner 1 or 2	
<b>Timber, raw</b>		wet wipe with cloth
<b>Timber, coated with phenol resin</b>	GETO MSP Cleaner 2	abrading necessary, then treat as timber, raw
<b>PMMA (Plexiglass)</b>	GETO MSP Cleaner 1 or 2	fine abrading <sup>1</sup> , pre-trial necessary
<b>Steel, raw</b>	GETO MSP Cleaner 1 or 2	If corrosion protection is required under the adhesive, initial priming is essential. Then proceed as with Steel, varnished.
<b>Steel, varnished</b>	GETO MSP Cleaner 1 or 2	sufficient adhesion on the steel must be ensured
<b>Steel, galvanized</b>	GETO MSP Cleaner 1 or 2	

Flash-off times (min/max) <sup>2</sup>		Application quantity
GETO MSP Cleaner 1	10 min/6 hrs	approx. 50 g/m <sup>2</sup>
GETO MSP Cleaner 2	10 min/6 hrs	approx. 50 g/m <sup>2</sup>

<sup>1</sup> Pre-treatment: Clean, abrade, clean. We recommend abrasive paper K1000 for abrading purposes.

<sup>2</sup> If the flash-off time is exceeded, the pre-treatment must be repeated before bonding.

**Before application, the detailed data sheets for the various pre-treatment products should be noted!**

Universally applicable: for satisfactory adhesion, the substrate must be clean, free of oil and grease as well as free of separator materials. We would therefore point out that the above information is based on our experience to date in practice and must be confirmed by individual trials. Liability or guarantees cannot be inferred from these instructions.

For subsequent varnishing, our data sheets and the varnish manufacturers' recommendations must be observed.

GETO MSP Cleaner 1, 1000 ml tin: **Part No. 850 496**

GETO MSP Cleaner 2, 1000 ml tin: **Part No. 850 497**

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84.03.03.2

## Preparation

1-part MS Polymer

## Preparation tables

This image shows a full page of blank graph paper. The grid consists of small, equal-sized squares formed by thin, dark gray lines. There are no margins, text, or other markings on the page.



Short flash-off times



Bostik Solvent

## Brief description

### Bostik Solvent 270 Delivery

## Thinners and cleaners

Thinner and cleaner for nitrile rubber adhesives  
1 litre tin: **Part No. 830 422**  
6 litre tin: **Part No. 830 424**



### Bostik Solvent 280 Delivery

Thinner and cleaner for adhesives dissolved  
in petrol, and as a cleaner for butyl residues  
6 litre tin: **Part No. 830 427**



### Bostik Solvent 300 Delivery

Thinner and cleaner for polychloroprene adhesives  
1 litre tin: **Part No. 830 429**

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84.04.01.2  
Pre-treatment  
Thinners and cleaners  
**Bostik Solvent**





Short flash-off times

Snowclean  
Cleaning agent**Brief description****Features****Multi-purpose cleaner**

- Can be used on all waterproof surfaces
- Works equally well in cold and hot water
- Dissolves oil, grease, grime, particle dirt
- Low pH at around 10
- Can be used as a heavy-duty cleaning agent (10% solution)
- Can be used as a daily cleaning agent (2-5% solution)
- Tested by the German Materials Testing Authority (Test Certificate 320126783-01)
- Product guarantee (number on each pack)
- Phosphate-free, APEO-free
- Free of halogens and solvents
- Bio-degradable
- Quickly separates in petrol and oil precipitators
- Can be disposed of in the drainage system after use
- No protective provisions
- Dries quickly after being rinsed clean
- Leaves a gleaming surface
- No odour pollution
- May replace cleaner solvents in certain cases
- Dissolves greasy dirt very well

**Cleans**

Cars, busses, campers, mobile kiosks, HGVs, tarpaulins, awnings, kitchen extractors, air filtering and ventilation systems, schools, hospitals, offices, hotels, restaurants, production premises and changing rooms in industrial and commercial enterprises, or on ships, trains, aircraft and in cars.

**Use****• Preliminary work**

Can be applied directly to all waterproof surfaces: Glass, plastic, metal, rubber, cloth, painted and varnished surfaces.

**• Thinning**

Snowclean Neutral S.P. is highly concentrated and can be used neat. However, it can also be diluted depending on the level of soiling, condition of the item, water hardness and contact temperature.

- Low pressure: Dilute 1 part Neutral S.P. in 5–10 parts water
- High-pressure cleaning: Use the concentrate, and utilise the chemical dosing system to dilute as required.

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- **Application**

Apply from the bottom up. Leave the cleaning agent to work for between three and five minutes, but do not allow to dry on. Repeat the process if Snowclean has dried on. Carry out a test before each use.

- **Rinsing off**

When cleaning at high pressure, start from the bottom right and work using systematic strokes. Rinse from the top down, repeating the process for the next section. Hot water (50-80 °C) will improve cleaning effectiveness.

- **Safety**

The excellent degreasing properties can dry out unprotected hands. Please consult the labels and safety data sheet for further information.

**Delivery**

5 litre canister: **Part No. 785 002**

25 litre canister: **Part No. 785 003**

200 litre vat: **Part No. 785 004**

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Short flash-off times


Snowclean Marine S.P.  
cleaning agent

## Brief description

### Features

### Alkaline cleaning and degreasing agent

- Dissolves oil, grease, grime, dirt; static binding
- Can also be used on wet surfaces
- Easily removed
- High yield
- Effective at low concentrations
- Does not harden plastic
- Product guarantee (number on each pack)
- Developed on the basis of water
- Free of halogens and solvents
- Phosphate-free, APEO-free
- Bio-degradable
- Quickly separates into petrol and oil precipitators
- Can be used in cold, hot, soft, hard and even salt water



### Cleans

HGVs, tankers, tarpaulins, scaffolds, tractors, pit cars, diggers, road finishers, derricks. For use on heavy dirt in industrial and workshop premises. For use when repairing fire damage, degreasing metals and in the heavy duty cleaning of machines, conveyor belts; for use in the catering, agricultural and food sectors.

### Use

#### • Preliminary work

Very hot surfaces (e.g. engine hoods) should be rinsed with cold water. Snow and ice should be rinsed off using hot water. Porous surfaces should be pre-wetted until the material no longer absorbs water.

#### • Thinning

Snowclean Marine S.P. is highly concentrated, and should be diluted with water according to the amount of dirt involved, condition of the object in question, water hardness and contact temperature. Threshold figure: 0.6% utility solution at 20 dH°.

- Low pressure: 1 part Marine S.P. to 20-50 parts water at 20-40 °C
- High-pressure cleaning 1: use the concentrate, and set the dosing mechanism to dilute to a 1-5% utility solution.
- High-pressure cleaning 2: dilute 1 part Marine S.P. with 1-3 parts water. Open the dosing mechanism fully.
- Tank, bath, manual: 1 part Marine S.P. to 25 parts water at 20-40 °C.

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- **Application**

Apply from the bottom up. Leave the cleaning agent to work for between three and five minutes, but do not allow to dry on. Repeat the process if Snowclean has dried on. Carry out a test before each use.

- **Rinsing off**

When cleaning at high pressure, start from the bottom right and work using systematic strokes. Rinse from the top down, repeating the process for the next section. Hot water (50-80 °C) will improve cleaning effectiveness.

- **Safety**

Care should be taken on all painted, varnished and aluminium anodized surfaces, especially at high temperature. Read the warnings on the label and the DIN safety data sheet before use.

**Delivery**

25 litre canister: **Part No. 785 007**

200 litre vat: **Part No. 785 012**

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Spiked roller



Spiked shoes



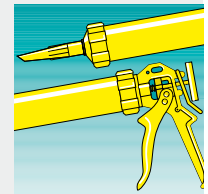
GETO Handtool 1



GETO Handtool 2



GETO Handtool 3/4



Tools

## GETO Handtool 1

### Manual cartridge gun (standard)

- Light and robust
- Patented clamping disk

**Part No. 845 101**



## GETO Handtool 2

### Manual cartridge gun (comfort)

- Excellent transmission
- Very high propulsion level
- Solid piston and housing
- Specifically for very viscous material

**Part No. 845 102**



## GETO Handtool 3

### Manual pouch gun, 300 ml

- Light and robust
- Patented clamping disk

**Part No. 845 103**

## Spare parts

Front sealing cap: **Part No. 845 120**

Receptor pipe, 300 ml: **Part No. 845 137**

Piston disk, blue: **Part No. 845 128**



## GETO Handtool 4

### Manual pouch gun, 600 ml

- Light and robust
- Patented clamping disk

**Part No. 845 104**

## Spare parts

Front sealing cap: **Part No. 845 120**

Receptor pipe, 600 ml: **Part No. 845 138**

Piston disk, blue: **Part No. 845 128**



85.01.01.2  
Working tools  
**Mechanical**

**GETO cartridge cutter**

- Easy, quick and clean cutting of plastic cartridges, nozzles and pouches.

**Part No. 860 211**



**Varnish roller**

For sealing variants V2–V4, or for primer application

**Part No. 840 088**



**Notched trowel**

For 2 mm layer thickness  
50 cm/4 mm toothing

**Part No. 840 095**



**Notched trowel**

For 3–4 mm layer thickness  
50 cm/6 mm toothing

**Part No. 840 085**



**Spiked roller**

24 mm wide  
For aerating and smoothing the fresh coating.

**Part No. 840 096**



**Spiked shoes (1 pair)**

For walking over the fresh coating.

**Part No. 840 092**



**Stirrer (mixer)**

**Part No. 840 094**





Strewing Gun



GETO Airtool 1



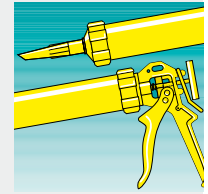
GETO Airtool 2



GETO Airtool 3



GETO Airtool 4/5



Tools

## GETO Airtool 1

### Spare parts

### Compressed air cartridge gun (closed)

- Light and robust
- Easy to use
- Very balanced weight distribution

**Part No. 845 105**

Front sealing cap: **Part No. 845 120**

Compressed air regulator: **Part No. 845 125**

Membrane: **Part No. 845 123**

Muffler: **Part No. 845 127**



## GETO Airtool 2

### Spare parts

### Manual cartridge gun (comfort)

- Compressed air/piston rod gun for cartridges (can be adapted for 300 ml pouches)
- Specifically for very viscous material
- Clean, recoil-free ejection

**Part No. 845 107**

Front sealing cap: **Part No. 845 120**

Compressed air regulator: **Part No. 845 125**

Membrane: **Part No. 845 123**

Muffler: **Part No. 845 127**



## GETO Airtool 3

### Compressed air cartridge gun (open)

- Very light and robust
- Quick cartridge loading
- Open design renders the cartridge label visible

**Part No. 845 106**



85.02.01.2  
Working tools  
**Pneumatic**

**GETO Airtool 4**

**Compressed air pouch gun, 300 ml**

- Light and robust
- Easy to use
- Special piston ensures optimum residual discharge

**Part No. 845 108**

Front sealing cap: **Part No. 845 120**

Compressed air regulator: **Part No. 845 125**

Muffler: **Part No. 845 127**



**Spare parts**

**GETO Airtool 5**

**Compressed air pouch gun, 600 ml**

- Light and robust
- Easy to use
- Special piston ensures optimum residual discharge

**Part No. 845 109**

Front sealing cap: **Part No. 845 120**

Receptor pipe, 600 ml: **Part No. 845 138**

Piston with safety cord: **Part No. 845 126**

Compressed air regulator: **Part No. 845 125**

Membrane: **Part No. 845 123**

Muffler: **Part No. 845 127**



**Spare parts**

**Strewing gun**

(compressed air) for fine and rough sand.

The gun enables Variants "V3–V4" to be quickly, cleanly and – above all – evenly strewn with sand.

**Part No. 840 086**



**Strewing gun**

(compressed air) for colour chips and fine or rough sand

(includes 10 meter compressed air tube).

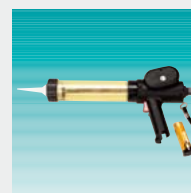
As well as sand strewing, this gun enables colour chips (V2) to be scattered quickly and easily, using a metered feed.

**Part No. 840 087**

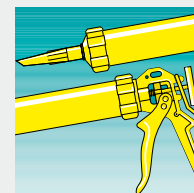




Quick charger



Battery gun



Tools

## Battery gun

### for 310 ml cartridges

Battery gun (includes 2.4 V battery) with continuously variable speed for quick and clean application of adhesives and sealants, 310 ml cartridges.

**Part No. 840 145**



## Accessories/spare parts

Quick battery charger  
(2.4 V / 7.2 V / 9.6 V / 12 V)  
Charging time 15 minutes

**Part No. 840 147**



Spare battery (2.4 V) for 840 145

**Part No. 840 146**



## Battery gun set

### for pouches

### 300–600 ml and 310 ml cartridges

Comprising: Battery gun, battery, quick charger

Battery gun set with continuously variable speed for quick and clean application of adhesives and sealants from 300/400/600 ml pouches and 310 ml cartridges.

**Part No. 840 148**



## Accessories/spare parts

Spare battery (7.2 V) for 840 148

**Part No. 840 149**

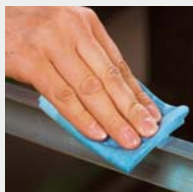








Various auxiliaries



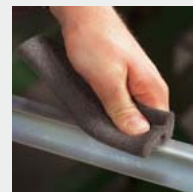
Pre-treatment with  
wipingcloth



Secure fitting with GETO  
Fixpoints



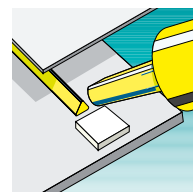
Cartridges and bag nozzles



Fine polish with emery  
cloth

## GETO Fixpoints Double-sided adhesive points

- 250 adhesive points on one roll
- Fast, exact fixing of parts to be joined
- Exactly adheres to adhesion thickness
- No cutting required



Thickness mm	Width mm	Length mm	Colour	Part No.
1,5	12	20	white	<b>860 201</b>
2,0	12	20	black	<b>860 202</b>

## GETO Smoothing agent

- Aqueous solution that cleanly smoothens freshly applied PU and MSP sealants
- Can be applied by finger or smoothing tool (e.g. GETO Fugenboy)
- If the seal weld needs to be subsequently over-painted, care should be taken that the welded surface is washed first. Residue from the smoothing agent may reduce the strength of adhesion of the paint.

500 ml can: **Art. No. 850 193**



## Emery sheets

- Emery cloth „super-fine 1000“ for surface pre-treatment
- 1 pack (5 sheets): **Art. No. 860 213**



## Wiping cloths

- For surface pre-treatment
  - Tear-resistant, solvent-resistant, no fluffing
- 1 pack (50 cloths): **Art. No. 860 221**



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## 86.01.01.2 Accessories Aids

### GETO Fugenboy-set

- Smoothing tool made of special non-stick silicon
  - Very sturdy, for various seam and joint sizes and radii
- 1 set: **Part No. 860 212**



### Standard nozzle adapter for pouches

- Fits well on tubular bags
  - Only the standard nozzles need to be replaced
  - Fine thread
- 1 per pack: **Part No. 840 170**



### GETO MSP/PU-Remover Simson

- Single-component remover for non-hardened MSP/PU remains
  - Can be applied using felt or cloth
- 1000 ml can: **Part No. 850 499**



### Cartridge nozzle, standard

- Length 110 mm
  - Fine thread
- Part No. 840 116**



### Cartridge nozzle, standard

- Length 110 mm
  - Coarse thread
- Part No. 860 105**



### Cartridge nozzle, special

- Length 160 mm
  - Coarse thread
- Part No. 860 103**



### Cartridge nozzle, single V

- Opening width: 7 mm
  - Opening height: 10 mm
  - Coarse thread
- Part No. 860 101**



### Bag nozzle, standard

- Length 120 mm
- Part No. 860 102**

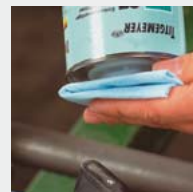


### Bag nozzle, special

- Length 150 mm
- Part No. 860 106**



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## Dimensioning of the sealant and adhesive geometry

Elastic sealants and adhesives can only realise their full potential (movement compensation, peel strength, impact resistance) if the geometry of the sealant/adhesive layer has been correctly determined.

This primarily means observing a minimum layer thickness. This, in turn, must be individually adapted to the bonding application. A layer thickness of between two and three millimetres has proven suitable for many applications. Greater movement requires greater layer thicknesses.

Layer thicknesses > 20 mm should be avoided, since such thicknesses would greatly extend the sealant/adhesive setting time, while also reducing the elasticity of the sealing/adhesive bond.

## Nozzle size table (approx. reference values)

Nozzle size			Adhesive surface/ thickness	
yields when injected				
B mm	H mm		B mm	H mm
5	4	→	10	1
8	8	→	10–15	1–2
8	10	→	15–20	2
10	12	→	20	2–3
8	12	→	10	5
10	15	→	15	5

## Consumption of GETO PUR and Kömmerling 2-component adhesives

Consumption is variable and depends on the application, substrate and layer thickness.

The following rule of thumb can be used:

Layer thickness x adhesive density = consumption kg/m<sup>2</sup>

## Adhesive and sealant coverage

Running metre of adhesive/sealant per packaging unit

Crawler ø mm	Cartridge at 310 ml	Pouch at 600 ml
4	24	47
6	11	21
8	6	12
10	4	7

Crawler Δ width X height	Cartridge at 310 ml	Pouch at 600 ml
5 x 5	24	48
8 x 10	8	15
10 x 10	6	12
10 x 15	4	8

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86.02.01.2

## Accessories

## Tables

## Use of adhesives

This image shows a full page of blank graph paper. The grid consists of small, equal-sized squares formed by thin, dark gray lines. The grid covers the entire area of the page, leaving no margins or other markings. There are 20 columns and 20 rows of squares, creating a total of 400 square units.

This image shows a full page of blank graph paper. The grid consists of small, uniform squares formed by thin, light gray lines. There are no margins, text, or other markings on the page.

## Notes

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# Terms and Conditions of Delivery and Payment

## 1. Period of validity of the Terms and Conditions

- a) All deliveries, performances, sales and offers are provided exclusively on the basis of these Terms and Conditions of Delivery and Payment. These then apply to all future business relationships, even if they are not expressly agreed upon again.
- b) We herewith expressly reject any general terms and conditions of trade of the Customer that contradict our Terms and Conditions of Delivery and Payment. Even if the Customer communicates its own terms, our Terms and Conditions of Delivery and Payment shall be deemed to come into effect at the latest upon receipt of the goods and performances. Letters of confirmation from the Customer shall not legally bind us, even if we do not expressly object to said letters.
- c) Agreements or amendments that deviate from these Terms and Conditions of Delivery and Payment – irrespective of how and in what form – shall only then be legally binding if confirmed by us in writing.
- d) The invalidity of any individual contractual provision shall not affect the validity of the Agreement. In the case of any provisions in these Terms and Conditions of Delivery and Payment being or becoming invalid or unenforceable, we shall have the authority to replace the invalid or unenforceable provision with a valid provision, the commercial purpose of which corresponds as closely as possible to that of the invalid or unenforceable provision.

## 2. Offer and conclusion of contract

- a) Our offers are subject to change without notice and are non-binding. Letters of confirmation and all orders require our written confirmation to be legally valid. This confirmation can also be provided by fax or e-mail.
- b) Drawings, illustrations, dimensions, weights or other performance data shall only be binding if this is expressly agreed in writing.
- c) We retain all ownership and copyrights to all technical documentation. Such documents must not be made available to any third parties without our prior consent.

## 3. Prices

- a) The prices in our Confirmation of Order plus the applicable statutory value added tax shall apply. Authoritative for the calculation of prices shall be the weights, numbers of units and square meter figures determined by the Vendor. Additional deliveries and performances not contained in our Confirmation of Order shall be invoiced separately.
- b) The prices quoted shall be valid ex-factory without packaging and freight. These will be invoiced separately. Packaging will not be taken back unless a statutory obligation to do so applies.
- c) If substantial increases in the prices of raw materials or energy occur within the space of contracts with an agreed delivery period of more than four months, the parties to the Agreement undertake to renegotiate the purchase price. If no agreement can be reached, the parties to the Agreement shall be entitled to withdraw from the Agreement. No further claims shall then be valid (e.g. for damages or repayment of expenses).

## 4. Period of delivery and performance

- a) Delivery periods and deadlines shall be subject to alteration without notice, unless a written agreement to the contrary is made.
- b) The delivery deadline shall be postponed appropriately for the duration of the disturbance, in cases of force majeure, industrial disputes, riots, official intervention, failure to deliver on the part of our suppliers and other unforeseeable, unavoidable and substantial occurrences. We shall be obliged to the Customer, to an equitable degree, to pass on the required information immediately and to adjust its obligations in good faith to the changed situation.
- c) If the hindrance lasts longer than three months, the Customer shall be entitled to withdraw from the Agreement due to the unfulfilled part of said Agreement, after providing a fair extension of the deadline. If it should be or become impossible to dispatch the goods due to extraordinary circumstances for which we are not responsible, we shall be authorized, notwithstanding immediate billing, to store said goods elsewhere for the account and at the risk of the Customer, should our storage facilities not suffice.
- d) We shall be entitled to partial deliveries and performances at all times. For purchases made for call-off, the call-offs shall be made as evenly and continuously as possible, in as much as no other agreement has been made. Once the acceptance period is over, remaining amounts can be cut, notwithstanding the ability to claim for damages. Goods produced but not called-off by the end of the acceptance period shall be billed as of the end of the acceptance period. We shall be entitled to store such goods elsewhere at the cost and risk of the Customer.
- e) The passing of delivery periods and deadlines will not relieve the Customer wishing to withdraw from the Agreement or demand damages for non-fulfillment, from having to allot a reasonable period within which to make performance – as a rule three weeks – or from declaring that it will reject the performance if the deadline has been missed.

## 5. Passage of risk

When delivering objects, the risk shall pass to the Customer as soon as the object being delivered is transferred to the person effecting the transport, or leaves our warehouses for shipping. We shall choose the route and type of shipping. The freight will be invoiced

at the freight rates valid on the day of billing. Any increase in the freight costs caused by subsequent alterations to the type of shipping, transport route, destination or similar factors pertaining to the freight costs shall be borne by the Customer, inasmuch as the Customer induced these changes. In the case of customers who pick up the goods themselves, risk shall pass to the Customer at the agreed place of delivery.

## 6. Warranties

- a) For defects as provided for by § 434 BGB (German Civil Code) we shall only be liable as follows: The Customer undertakes to inspect the goods received immediately with regard to amount and quality. Obvious defects are to be reported to us in writing within a period of 14 days. In the case of mutual commercial acts between businessmen, §§ 377, 378 HGB (German Commercial Code) shall remain unaffected.
- b) If the Customer finds a defect in the goods, it shall not be authorized to dispose over the goods, i.e. it may not split, resell or further process the goods until agreement has been reached as to how to deal with the complaint or an independent taking of evidence has been carried out.
- c) The Customer undertakes to inform us immediately of any damage incurred during transport. The Customer shall take care of the required formalities with the Carrier.
- d) In the case of justified complaint, we shall be entitled to choose whether to rectify the defective goods or to provide substitute delivery. Multiple rectifications shall be permitted.
- e) The warranty does not include damage caused by false information from the Customer, storage not in accordance with instructions or defective processing or use of the goods.
- f) If it is impossible to eliminate the defect or effect the substitute delivery within the appropriate period of grace provided by the Customer, the Customer, who is not the consumer, shall only have the right to either withdraw from the Agreement or reduce the purchase price.
- g) If the Customer does not give us the opportunity and a fair amount of time to convince ourselves of the defect and carry out the required subsequent fulfillment (rectification or replacement delivery), any claims arising from the deficiency shall become invalid.

## 7. Limitation of liability

- a) We shall be liable in the case of intent, gross negligence or violation of substantial contractual obligations, as well as when promised quality is not delivered. Claims otherwise not expressly stipulated in these Terms will not be valid, and in any case shall not exceed the damage foreseeable at the time of closure of the Agreement, or the value of the delivered goods.
- b) Inasmuch as our liability is excluded or restricted, this shall also apply to the personal liability of our employees, legal agents and assistants. In cases of gross negligence by simple vicarious agents, we shall be liable for reimbursement of the typical, foreseeable damage.
- c) The legal provisions regarding burden of proof shall remain unaffected by this.
- d) The above provision shall not apply to claims under the product liability law for personal injury or damage to privately used property.

## 8. Statutory limitation

All claims made by the Customer – for whatever legal reasons – shall be time-barred in 12 months. The statutory limitation times shall apply to intentional or fraudulent behavior and claims stemming from the product liability law.

## 9. Payment

- a) Inasmuch as no other agreements are reached, all payments shall be due in net within thirty days of the date of invoice. We grant a 2 % discount for cash and book payments made within ten days of the date of invoice.
- b) We expressly reserve the right to refuse checks and bills of exchange. Acceptance is always on account of performance. Discount and bill charges shall be at the expense of the Customer and due immediately. Excluding §§ 366, 367 BGB, and despite stipulations of the Customer to the contrary, we shall determine which claims are settled by the Customer's payment. Upon delay of performance, we shall be entitled to demand the ordinary bank interest rate, but not less than 8 % above the base interest rate in accordance with § 1 of the discount rate transitional law of June 09, 1998.

## 10. Retention of ownership

- a) We shall retain ownership of the delivered goods until full payment of the purchase price has been received. In the case of goods that the Buyer receives from us within the scope of an ongoing business relationship, we shall retain ownership until all claims against the Buyer stemming from this business relationship have been satisfied, including claims arising in the future from other agreements made at the same time or later. This shall also apply when individual or all claims have been recorded in an ongoing invoice and the balance drawn and confirmed by the Customer. If a bill of exchange liability is founded by the Buyer in the context of the payment of the purchase price (check, bill of exchange), the retention of ownership shall not expire before the Customer honors the bill of exchange as drawee. In the case of

overdue payment by the Customer, we shall be entitled to repossess the goods subsequent to a reminder, and the Buyer will be obliged to surrender possession.

- b) If the conditional commodity is processed into a new piece of movable property, the further processing shall be done for us, without any obligations arising for us: the new commodity shall become our property. In the case of processing together with goods not belonging to us, we shall acquire co-ownership of the new object to a degree in relation to the value of the conditional commodity to the other goods at the time of processing. If the conditional commodity is joined, commingled or mixed with goods not belonging to us, as stipulated in §§ 947, 948 BGB, we shall become co-owners in accordance with the legal provisions. If the Customer acquires sole ownership on the basis of the joining, commingling or mixing, co-ownership to the extent of the value of the conditional commodity in relation to the other goods at the time of joining, commingling or mixing transfers to us now, in advance. In such cases, the Customer shall be obliged to store the object of which we are owner or co-owner, which is also a conditional commodity in the sense of the above stipulations, at no cost.
- c) If the Customer sells the conditional commodity alone or in connection with goods not belonging to us, the customer assigns to us now, in advance, the value of the conditional commodity as generated from the sale, along with all other rights and ranked before all others. We accept this assignment. The value of the conditional commodity is the sum resulting from our invoice, which, however, remains out of the valuation as soon as third-party rights conflict. If the resold conditional commodity is in our ownership, the assignment of the claims shall include the sum that corresponds to the value of the share of the co-ownership.
- d) The customer shall only be entitled and authorized to resell, use or process the conditional commodity within the scope of ordinary business activities and only on the condition that the claims as stipulated in the paragraphs above are in actual fact assigned to us. The Customer is not authorized to any other disposition over the conditional commodity, in particular pledging or assignment as security.
- e) Reserving the right to revoke, we authorize the customer to collect the claims assigned to us in accordance with paragraphs c) and d). We will not exploit our own right of collection, as long as the Customer covers its payment obligations – also towards third parties. If requested by us, the Customer shall name the obligors of the assigned claim and notify them of the assignment. We shall also be authorized to notify the obligors of the assignment. The Customer undertakes to inform us immediately, also informing us of the documents required for an objection, as to any levies upon the conditional commodity by third parties.
- f) The right of resale, the right to use or process the conditional commodity or the authorization to collect the assigned claims shall lapse with stoppage of payments and/or application for the opening of insolvency procedures. In the case of a check or bill protest, the authorization to collect shall also lapse. This does not apply to the rights of the insolvency administrator.
- g) If the value of the securities offered exceeds the claims (where applicable reduced by deposits and part payments) by more than 20 %, we shall be obliged to reassign or release the securities as we choose. Once all claims from the business relationship have been settled, the ownership of the conditional commodity and the assigned claims shall transfer to the Buyer.

## 11. Data protection

The Customer is herewith informed that we deal with person-related data gained within the scope of our business relationship in accordance with the provisions of the Federal Data Protection Law.

## 12. Place of performance, place of jurisdiction and applicable law

- a) Osnabrück in Germany shall be the place of performance for both parties for delivery, performance and payment for all rights and obligations arising from the Agreement.
- b) The sole place of jurisdiction for all disputes arising directly or indirectly from the contractual relationship shall be Osnabrück in Germany (also for bill of exchange, check and other documentation processes).
- c) Solely the laws of the Federal Republic of Germany shall apply for these Terms and Conditions and all legal relationships between us and the Customer. The UN agreement on contracts of international merchandise sales of April 11, 1980 shall in no case apply.

Osnabrück, September 01, 2003



**Gebr. TITGEMEYER GmbH & Co. KG**

Hannoversche Straße 97

(Navigation: Hettlicher Masch 2)

49084 Osnabrück, Germany

P.O. Box 43 20

49033 Osnabrück, Germany

Telephone: +49 (0)5 41/58 22-0

Telefax: +49 (0)5 41/58 22-494

E-Mail: [export@titgemeyer.com](mailto:export@titgemeyer.com)

[www.titgemeyer.com](http://www.titgemeyer.com)