ADHESIVES AND SEALANTS
AUTOMOTIVE

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRAPUR 125 - KÖRAPUR 128

ELASTIC ONE COMPONENT ADHESIVES AND SEALANTS

For primed and painted metals, aluminium and steel, wood and duroplastics. For bonding and sealing in the manufacture of containers, vehicles, vehicle bodywork, air conditioning and heating equipment. Approval for contact with foodstuffs.

Base	One component polyurethane, curing by reaction with moisture
Density	1,2 g/cm³
Cure rate	3 mm (24 hours)
Elongation at tear	450 %
Tensile strength	2 N/mm²
Shear strength	2 N/mm²
Hardness Shore A	45
Properties	Elastic, good resistance to humidity and weathering, resistant to temperatures from -40°C to +90°C (up to 120°C for short intervals), overpaintable after curing

Sealing application with Körapur 125

Floor construction with Körapur 128

	KÖRAPUR 125 *Elastic one component PUR-sealant, also suitable for bonding applications*	KÖRAPUR 128 *Elastic one component PUR-sealant, self levelling, for various sealing and bonding applications*
Colour	White, grey, black	White, approx. RAL 9010
Viscosity	Thixotropic, low slump	Self-levelling, easy spread
Skin time	45 minutes	35 minutes
Change in volume	6 %	9 %
Tear propagation strength	9 N/mm	6 N/mm
Packaging units	310 ml aluminium cartridge 600 ml sausage 20 kg hobbock 230 kg drum	600 ml sausage

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRAPUR 125 - KÖRAPUR 128

Application temperature	+5°C to +35°C
Preparation	The surfaces to be bonded must be clean, dry and free from grease. For cleaning we recommend Körasolv PU or CR. In the case of powder coated substrates, Körasolv WL should be used. To increase bond strength of non-porous substrates such as glass, glass-fibre reinforced plastics, aluminium, stainless steel, etc. we recommend the use of Körabond HG 81. For porous substrates such as wood, Körabond HG 74 is recommended. For certain plastics such as ABS or PVC we recommend the use of Körabond HG 77 or HG 81. Users are advised to confirm the compatibility and suitability of the products with their own tests.
Bonding	Apply the product to the substrate using a sealant applicator gun. If required, the product can be spread using a trowel. The thickness of the layer will depend on the type of materials to be bonded. The materials to be bonded should be pressed firmly together within 10 minutes after application of the sealant adhesive. Due to the low initial tack, we recommend mechanical fixing in some applications until a complete cure is obtained. The cure time is dependent on temperature and humidity, and can be reduced by spraying a light mist of water onto the materials to be bonded. This may be required in winter.
Storage	Do not store at temperatures below 5°C or above 25°C. When stored in unopened containers, usable for up to 9 months.
Cleaning	Clean tools immediately after use with Körasolv PU. Cured material can only be removed mechanically.

For safety information refer to the Material Safety Data Sheet

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRAPUR 140 - KÖRAPUR 140 / 2-k

ELASTIC ADHESIVE AND SEALANT

Elastic, moisture curing one- and two-part adhesive for primed and painted metals, aluminium and steel, wood and duroplastics.
For bonding in the manufacture of containers, vehicles, vehicle bodywork, air conditioning and heating equipment.

Base	Polyurethane, curing by reaction with moisture or hardeners
Colour	White, grey, black
Density	1,2 g/cm³
Viscosity	Thixotropic, low slump
Skin time	45 minutes
Elongation at tear	400 %
Tensile strength	4 N/mm²
Shear strength	3 N/mm² (at a layer thickness of 2 mm)
Tear strength	7 N/mm
Change in volume	7 %
Hardness Shore A	55
Properties	Elastic, good resistance to humidity, weathering and temperatures from -40°C to +90°C. For short intervals, resistant up to 120°C. Overpaintable after curing. For a faster curing system, we recommend the use of Körapur 140 / 2k, plus hardener Köracur 100 or Köracur 110.

Bonding of a roof-element with Körapur 140

Bonding of edge profiles with Körapur 140 / 2-part

	KÖRAPUR 140	KÖRAPUR 140 2-k
	Elastic one component PUR-adhesive	*Elastic PUR-adhesive, excellent mechanical properties*
Pot life	-	20 min
Cure rate	3 mm (24 hours)	2-3 hours
Packaging units	310 ml aluminium cartridge 600 ml sausage 20 kg hobbock 230 kg drum	20 kg hobbock 230 kg drum

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRAPUR 140 - KÖRAPUR 140 / 2-k

Application temperature	+5°C to +35°C
Preparation	The surfaces to be bonded must be clean, dry and free from grease. For cleaning we recommend Körasolv PU or CR. In the case of powder coated substrates, Körasolv WL should be used. To increase bond strength on non-porous substrates such as glass, glass-fibre reinforced plastics, aluminium, stainless steel etc., we recommend the use of Primer Körabond HG 81. For porous substrates such as wood, Körabond HG 74 is recommended. For certain plastics such as ABS or PVC we recommend the use of Körabond HG 77 or Körabond HG 81. Users are advised to confirm the compatibility and suitability of the products with their own tests.
Bonding	Apply the product to the substrate using a sealant applicator gun. The thickness of the layer will depend on the type of materials to be bonded. The materials to be bonded should be pressed firmly together within 10 minutes after application of the adhesive. Due to the low initial tack, we recommend mechanical fixing in some applications until a complete cure is obtained. The cure time is dependent on temperature and humidity and the dimensions of the seam (or joint).
Storage	Do not store at temperatures below 5°C or above 25°C. When stored in unopened containers, usable for up to 9 months.
Cleaning	Clean tools immediately after use with Körasolv PU. Cured material can only be removed mechanically.

For safety information refer to the Material Safety Data Sheet

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRAPOP 216 - KÖRAPOP 223

ELASTIC ONE COMPONENT SEALANTS

For the manufacture of vehicles, vehicle body work, containers, air conditioning and heating equipment.
Good adhesion to many metals (zinc, aluminium, steel), painted and primed surfaces, wood, thermoset plastics and some thermoplastics.
Excellent UV resistance.
Can be used without primer on a variety of substrates after cleaning.

Base	MS-polymer, one component, curing by reaction with moisture
Cure rate	3 mm (24 h)
Skin time	25 minutes
Properties	Elastic, very good resistance to moisture, weathering and to temperatures from -40°C to +80°C, overpaintable up to 5 days after application. Isocyanate and silicone free.

Seam sealing application with Körapop 216

Easy brushable, joint sealing with Körapop 223

	KÖRAPOP 216 *High-quality, sprayable seam-sealer*	KÖRAPOP 223 *Thixotropic, spreadable sealant with excellent mechanical properties*
Density	1,48 g/cm³	1,64 g/cm³
Colour	Grey (further colours on request)	White, grey, black
Viscosity	Slightly thixotropic, applied using a suitable sealant spray-gun	Thixotropic, spreadable sealant
Hardness Shore A	40	32
Elongation at break	270 %	350 %
Tensile strength	1,6 N/mm²	0,8 N/mm²
Tear strength	6 N/mm (Form B - ASTM D 624)	-
Packaging units	310 ml PE-cartridge	310 ml PE-cartridge 600 ml sausage 270 kg drum

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRAPOP 216 - KÖRAPOP 223

Application temperature	+5°C to +30°C
Preparation	The surface to be sealed must be clean, dry and free from dust and grease. Körapop 216 and Körapop 223 can be used without primer on most materials, after cleaning. Users are advised to confirm the compatibility and suitability of the products with their own tests.
Storage	Do not store at temperatures below 5°C or above 25°C. When stored in unopened containers, usable for at least up to 12 months.
Cleaning	Clean tools immediately after use with Körasolv PU. Cured material can only be removed mechanically.

	KÖRAPOP 216	KÖRAPOP 223
Bonding	Apply Körapop 216 using a sprayable sealant applicator gun, which can be adjusted according to requirements (structural seam, profile seam, coating). Note: the gun must contain a cartridge at all times. Never store the gun without a cartridge as the material in the gun will cure. Do not allow contact between Körapop 216 and fresh (not fully cured) PU.	Apply Körapop 223 using a sealant applicator gun. The thickness of the layer depends on the types of material to be bonded and the expected movement. Join the materials to be bonded within 10 minutes after application of the sealant and press firmly together. We recommend mechanical fixing until a complete cure is obtained. The cure time is dependent on temperature and humidity and the thickness of the adhesive layer

For safety information refer to the Material Safety Data Sheet

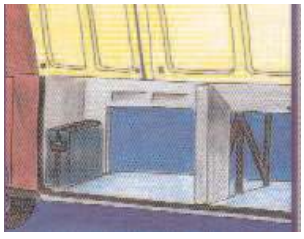
KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRAPOP 225 - KÖRAPOP 225 / 2-k

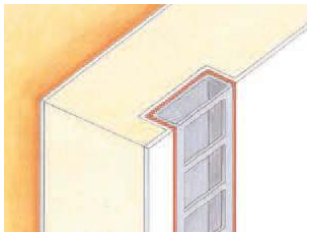
ELASTIC ADHESIVE AND SEALANT

For vehicle bodywork, containers and vehicle construction, air conditioning and heating equipment
Good adhesion to glass, many kinds of metals (zinc, aluminium, steel), painted and primed surfaces, wood, duroplastics and some thermoplastics.
Excellent UV resistance. Approval for contact with foodstuffs.
Can be used without primer on a variety of substrates after cleaning.

Base	MS-polymer, curing by reaction with moisture or hardeners
Colour	White (further colours on request)
Density	1,44 g/cm³
Viscosity	Thixotropic, low slump
Skin time	25 minutes
Elongation at tear	500 %
Tensile strength	3,0 N/mm²
Tear strength	20 N/mm (DIN 53 515)
Hardness Shore A	42
Properties	Elastic, good resistance to humidity and weathering and to temperatures from -40°C to +80°C. For short intervals, resistant up to 120°C. Can be overpainted immediately after application. We recommend that users test the compatibility of the paint to be used. For a faster curing system, we recommend Körapop 225 / 2-K plus hardener Köracur 310 or Köracur 350. Isocyanate and silicone free.



Bonding and sealing of the l uggage compartment flaps with Körapop 225



Bonding of double-deck loading rails with Körapop 225 / 2-k

	KÖRAPOP 225 *MS-Polymer, spreadable. Excellent mechanical properties. Isocyanate and silicone free*	KÖRAPOP 225 / 2-k *Fast curing*
Pot life	-	20 minutes
Cure rate	3 mm (24 hours)	2-3 hours
Packaging units	310 ml PE-cartridge 600 ml sausage 25 kg hobbock 270 kg drum	220 ml cartridge 25 kg hobbock 270 kg drum

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRAPOP 225 - KÖRAPOP 225 / 2-k

Application temperature	+5°C to +30°C
Preparation	The surfaces to be bonded must be clean, dry and free from dust and grease. Körapop 225 and Körapop 225 / 2-k can be used without primer on most materials. Users are advised to confirm the compatibility and suitability of the products with their own tests.
Bonding	Apply Körapop 225 using a sealant applicator gun. The thickness of the layer depends on the types of material to be bonded and the expected movement. We recommend mechanical fixing until a complete cure is obtained. The cure time is dependent on temperature and humidity and the thickness of the adhesive layer.
Storage	Do not store at temperatures below 5°C or above 25°C. When stored in unopened containers, usable for up to 12 months.
Cleaning	Clean tools immediately after use with Körasolv PU. Cured material can only be removed mechanically.

For safety information refer to the Material Safety Data Sheet

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRAPOP 235 - KÖRAPOP 240

ELASTIC ONE COMPONENT ADHESIVES

For vehicle bodies, containers and vehicle construction.
Good adhesion to glass, most metals, painted and primed surfaces, wood, duroplastics and some thermoplastics.
Excellent UV resistance.
Can be used without primer on a variety of substrates after cleaning.

Base	MS polymer, one component, curing by reaction with moisture
Colour	White (further colours on request)
Viscosity	Thixotropic, low slump
Skin time	10 minutes
Tensile strength	3,3 N/mm²
Properties	Elastic, good resistance to moisture and weathering and to temperatures from -40°C to +80°C. For short intervals resistant up to +120°C. Overpaintable immediately after application. Isocyanate and silicone free.

Seal between body and insulating glass element with Körapop 235

Bonding and sealing of mountings made of thermoplastic materials with Körapop 240

	KÖRAPOP 235 *MS Polymer, thixotropic spreadable. Excellent mechanical properties.*	KÖRAPOP 240 *Good cataplasma properties*
Density	1,44 g/cm³	1,41 g/cm³
Elongation at tear	550 %	430 %
Shear strength	2,2 N/mm²	2,7 N/mm²
Tear strength	24 N/mm	21 N/mm
Hardness Shore A	50	55
Packaging units	310 ml PE-cartridge 600 ml sausage	310 ml PE-cartridge 600 ml sausage

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRAPOP 235 - KÖRAPOP 240

Application temperature	+5°C to +30°C
Preparation	The surfaces to be bonded must be clean, dry and free from dust and grease. Körapop 235 and Körapop 240 can be used without primer on most materials. Users are advised to confirm the compatibility and suitability of the products with their own tests.
Bonding	Apply Körapop 235 and Körapop 240 using a sealant applicator gun. The thickness of the layer will depend on the types of material to be bonded. Join the materials to be bonded within 10 minutes after application and press firmly together. We recommend mechanical fixing until a complete cure is obtained. The cure time is dependent on temperature and humidity and the thickness of the adhesive layer.
Storage	Do not store at temperatures below 5°C or above 25°C. When stored in unopened containers, usable for up to 9 months.
Cleaning	Clean tools immediately after use with Körasolv PU. Cured adhesive can only be removed mechanically.

For safety information refer to the Material Safety Data Sheet

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRAPUR 666 - KÖRAPUR 840

TWO COMPONENT-REACTIVE ADHESIVES

High strength adhesives for use in the manufacture and construction of commercial and refrigerated vehicles and containers.
Good adhesion to wood, steel, aluminium, duroplastics and some thermoplastics.

Base	2-part polyurethane adhesives, solvent free	
Colour	Beige	
Pot life	Variable according to grade	
Working time	Variable according to grade	

Bonding of floor elements

Assembly bonding

	KÖRAPUR 666 *Excellent adhesion to wood*	KÖRAPUR 840 *With flexible properties*
Density	1,70 g/cm³ (resin) 1,23 g/cm³ (hardener) 1,63 g/cm³ (mixed)	1,55 g/cm³ (resin) 1,23 g/cm³ (hardener) 1,45 g/cm³ (mixed)
Viscosity	50.000 mPas (mixed)	40.000 mPas (mixed)
Mix ratio	Resin : hardener 6 : 1 (by weight)	Resin : hardener 5 : 1 (by weight)
Initial strength	12-16 hours at 20°C	6-8 hours at 20°C
Shear strength	aluminium / wood 17 N/mm² at -20°C 14 N/mm² at 20°C 3,5 N/mm² at 80°C	aluminium / aluminium 24 N/mm² at -20°C 16 N/mm² at 20°C 4,4 N/mm² at 80°C
Properties	Good resistance to humidity and weathering, particularly good adhesion to aluminium, wood, PVC (Rigid) and GRP	Flexible at low temperatures, good resistance to humidity and weathering
Packaging units	0,350 kg mixing cartridge 1 kg mixing unit 6 kg tin 30 kg hobbock 300 kg drum	0,360 kg mixing cartridge 0,540 kg tandem cartridge 5 kg tin 30 kg hobbock 300 kg drum

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRAPUR 666 - KÖRAPUR 840

Application temperature	+5°C to +25°C
Preparation	The surfaces to be bonded must be clean, dry and free from dust and grease. We recommend that metal surfaces should be prepared by abrasion. A primer may be applied to improve the bond strength and ageing characteristics, as well as resistance to hydrolysis. Thoroughly mix both components together (agitation 400 revs/min) until an even colour is obtained. See separate leaflet on Mixing Instructions for the mixing cartridge.
Bonding	Apply an even layer of adhesive using a spatula or trowel, ensuring complete coverage of the surfaces to be bonded. Maximum bond strength is achieved after 10-36 hours in the case of Körapur 666 and after 24 hours in the case of Körapur 840.
Storage	Do not store at temperatures below 10°C or above 25°C. When stored in unopened containers at recommended temperatures, usable for up to 12 months
Cleaning	Clean tools immediately after use with Körasolv PU. Cured adhesive can only be removed mechanically. When processing Körapur 666 and Körapur 840 avoid direct skin contact with the uncured adhesive. Wear protective gloves.

For safety information refer to the Material Safety Data Sheet

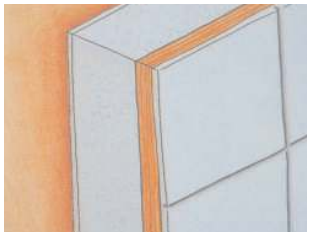
KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRAPUR 648 - KÖRAPUR 672

TWO COMPONENT REACTIVE ADHESIVES

For the construction of sandwich elements for refrigerated and commercial vehicles and caravans.
Good adhesion to wood, steel, aluminium, GRP, duroplastics and some thermoplastics.

Base	2 part polyurethane adhesives, solvent free
Colour	Beige
Properties	High strength, very good resistance to humidity and weathering



Bonding of 4-layer-sandwich-element

Bonding of 5-layer-sandwich-element

	KÖRAPUR 648 *Long pot life* *Long working time* *Low viscosity*	KÖRAPUR 672 *Excellent adhesion to wood*
Density	1,49 g/cm³ (resin) 1,23 g/cm³ (hardener) 1,42 g/cm³ (mixed)	1,67 g/cm³ (resin) 1,23 g/cm³ (hardener) 1,60 g/cm³ (mixed)
Viscosity	ca. 1.400 mPas (mixed)	ca. 8.000 mPas (mixed)
Mix ratio	Resin : hardener 3,5 : 1 (by weight)	Resin : hardener 5 : 1 (by weight
Pot life	120 minutes	60 minutes
Working time	180 minutes	100 minutes
Initial strength	12-16 hours	8 hours
Packaging units	30 kg hobbock 270 kg drum 1.300 kg container	5 kg tin 30 kg hobbock 300 kg drum 1.300 kg container

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRAPUR 648 - KÖRAPUR 672

Application temperature	+5°C to +25°C
Preparation	The surfaces to be bonded must be clean, dry and free from dust and grease. We recommend that metal surfaces are prepared by abrasion. A primer may be applied to improve the bond strength and ageing characteristics, as well as resistance to hydrolysis. Thoroughly mix both components together (agitation 400 revs/min) until an even colour is obtained.
Bonding	Apply an even layer of adhesive using a spatula, trowel or suitable application equipment to the surfaces to be bonded. The thickness of the adhesive layer is determined by the type of materials to be bonded. Maximum bond strength is achieved after 36 hours in the case of Körapur 648 and after 24 hours in the case of Körapur 672.
Storage	Do not store at temperatures below +10°C or above 25°C. When stored in unopened containers, usable for up to 12 months.
Cleaning	Clean tools immediately after use, cured adhesive can only be removed mechanically. When processing Körapur 648 and Körapur 672 avoid direct skin contact with the uncured adhesive. Wear protective gloves.

For safety information refer to the Material Safety Data Sheet

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRACOLL WB 12

SOLVENT FREE DISPERSION ADHESIVE

For bonding applications in the construction of passenger vehicles, including floor and wall covering trim, sound and thermal insulation and decorative laminates.
Also bonds to wood, sheet metal and GRP.
A universal adhesive for a wide variety of applications.

Base	EVA / acrylic ester copolymer with self-cross-linking properties
Colour	White
Density	1,0 g/cm³ (+23°C)
Viscosity	9.000 - 13.000 mPas, can be applied by spray gun, roller and brush
Solid content	68 %
Properties	Resistant to a large extent to humidity, high temperature stability up to approx. 110°C

Bonding floor coverings with Köracoll WB 12

KÖRACOLL WB 12
Universal adhesive for a variety of applications

Coverage	250 - 400 g/m² (depending on the substrate)
Shear strength	80 N/cm² at 23°C (PVC)
Peel resistance	18 N/cm at 23°C (PVC

Packaging units	10 kg plastic bucket

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRACOLL WB 12

Application temperature	+10°C to +30°C
Preparation	The surfaces to be bonded must be clean, dry and free from dust and grease. Please refer to our separate leaflet for detailed Processing Instructions.
Bonding	Apply an even layer of adhesive to one of the substrates to be bonded using a spatula, trowel or suitable application equipment. Immediately, but not later than 10 minutes after application of the adhesive, join the two substrates together and use a brush or roller to ensure good contact between the two surfaces and to exclude any entrapped air. Remove any excess adhesive with water immediately. Open assembly time is approx. 20 minutes. For use as a contact adhesive, evenly apply the adhesive to each of the substrates to be bonded using a spatula or brush. Leave for between 20 to 40 minutes before joining the two substrates together firmly to ensure good contact and to exclude any entrapped air. Do not expose the bond to mechanical stress for at least 10 hours.
Storage	Do not store at temperatures below 10°C or above 25°C. When stored in unopened containers, usable for up to 9 months.
Cleaning	Clean tools immediately after use with Körasolv PU. Cured adhesive can only be removed mechanically. When processing Köracoll WB 12 avoid direct skin contact with the uncured adhesive. Wear protective gloves.

For safety information refer to the Material Safety Data Sheet

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

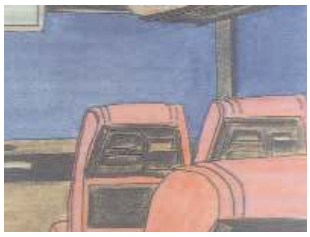
KÖRAPREN FU 2030 - KÖRAPREN FU 35

POLYCHLOROPRENE CONTACT ADHESIVE

Universal contact adhesive for bonding applications in the construction of passenger vehicles including floor and wall covering trim, sound and thermal insulation and decorative laminates. Also bonds to wood, sheet material and GRP. Not suitable for bonding of polystyrene.

Base	Polychloroprene, containing solvent
Density	0,86 g/cm³
Coverage	250-300 g/cm³

Bonding floor coverings with Körapren FU 2030



Bonding wall coverings in bus and caravan construction with Körapren FU 35

	KÖRAPREN FU 2030 *Can be applied by brush and roller; universal adhesive for small to medium surface areas*	KÖRAPREN FU 35 *Sprayable, for larger surface areas*
Colour	Beige, transparent	Light yellowish, transparent
Viscosity	ca. 3.000 mPas	ca. 400 mPas
Solid content	23 %	21 %
Properties	High strength	High strength, good resistance to humidity and high temperatures
Packaging units	650 g tin 4,5 kg tin 11 kg keg	10 kg keg 170 kg drum

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRAPREN FU 2030 - KÖRAPREN FU 35

Application temperature	+12°C to +25°C
Preparation	The surfaces to be bonded must be dry, clean and free from grease
Storage	Store in tightly closed containers at temperatures not below 10°C or above 25°C. Shelf life of 9-12 months, when stored in tightly closed containers at recommended temperatures.
Cleaning	Clean tools and remove fresh spots using Körasolv PU.

	KÖRAPREN FU 2030	KÖRAPREN FU 35
Bonding	Apply an even layer of adhesive by brush or roller onto the two parts to be bonded. Allow to dry for approx. 15 minutes, then press firmly together. Allow at least 60 minutes after application of the adhesive for the materials to bond. This time will depend on the temperature, thickness of the adhesive film and the absorbency of the substrate.	Spray an even coat of adhesive onto the two surfaces to be bonded. Spray pressure and nozzle size will depend upon application. Allow to dry for 10-15 minutes, then press firmly together. Allow at least 60 minutes after application of the adhesive for the materials to bond. This time will depend upon the temperature, thickness of the adhesive film and the absorbency of the substrates.

For safety information refer to the Material Safety Data Sheet

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRATAC C 12 - KÖRATAC DF 841

POLYMER ADHESIVES

For cold-welding or bonding plasticized PVC (tank sealing foils, roof foils etc) and rubber (EPDM, SBR, CR) to a wide variety of other materials, such as wood, metal, glass and plastics eg. rigid PVC.

Base	Synthetic resins
Colour	Transparent
Consistency	Easily brushable, no stringing

Bonding of rubber components to metals and plastics (excl. PE, PP etc.) with Köratac C 12

Bonding flexible PVC door seals with Köratac DF 841

	KÖRATAC C 12 *Fast curing, solvent free, for small areas*	KÖRATAC DF 841 *For bonding flexible and rigid PVC components and for sealing applications in commercial vehicle constructions*
Density	1,0 g/cm³	0,9 g/cm³
Coverage	100-250 g/m²	60-100 g/m²
Open time	Less than 30 sec.	Less than 1 minute
Properties	High strength, good resistance to humidity	High strength, high grab, good resistance to humidity, and to high temperatures
Packaging units	650 g tin 4,5 kg keg 11 kg keg	1 litre tin 10 kg keg 170 kg drum

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRATAC C 12 - KÖRATAC DF 841

Application temperature	Not below +12°C
Storage	Can be stored for 12 months in original containers. Do not store below 10°C.
Cleaning	Körasolv PU

	KÖRATAC C 12	KÖRATAC DF 841
Preparation	The surfaces to be bonded must be dry, clean and free from dust and grease. As the curing process of the adhesive is started with air humidity acting as catalyst, the humidity in the workroom should amount to 40-70%.	Due to the multitude of different PVC types, in particular of plasticized PVC, preliminary tests have to be carried out for examination of swelling and dissolving characteristics of the material. Clean contaminated foils with Körasolv GL.
Bonding	Exact dosage by using the applicator nozzle. Apply the parts to be bonded into the wet adhesive film and press for 10 to 12 seconds. The curing of the adhesive starts immediately after application but will only be completed after 24 hours (25°C / 50% r.h.). The parts to be bonded cannot be positioned after application to the adhesive film.	Quick bonding adhesive system to be applied one or two sided. If one side applied, join the substrates immediately after application of the adhesive. If applied on both substrates wait for approx. 2 minutes after adhesive application before joining them.

For safety information refer to the Material Safety Data Sheet

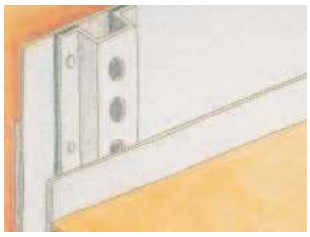
KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖDIPLAST CS - KÖDIPLAST CT

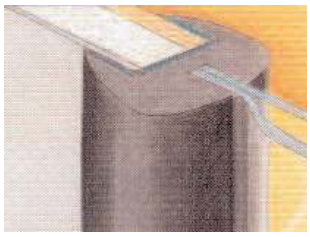
ONE COMPONENT BUTYL SEALANTS

For external joints, gaps and junctions on surfaces such as wood, metal, glass, plastics and many other materials.
Sealant for commercial vehicles, caravans and containers.
Not suitable for high movement joints.

Base	Butyl rubber, one component
Colour	Grey
Viscosity	Thixotropic sealant
Properties	Service temperature from -30°C up to +80°C. Good resistance to weathering. Do not use in contact with oils, solvents and fuels.



Sealing riveted profiles with Ködiplast CS



Sealing against water with Ködiplast CT

	KÖDIPLAST CS *Soft, non-setting*	KÖDIPLAST CT *Soft, non-setting, easily removed*
Density	1,34 g/cm³	1,42 g/cm³
Shrinkage	20 %	25 %
Weight loss	15 %	15 %
Packaging units	310 ml aluminium-cartridge 600 ml sausage 25 kg hobbock	600 ml sausage

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖDIPLAST CS - KÖDIPLAST CT

Application temperature	+15°C to+25°C
Preparation	The surfaces must be clean, dry and free from grease. Use Körasolv GL to degrease non porous surfaces such as glass and metal. Please contact our Technical Department for advice if the product is to be used with plastics such as Polycarbonate and PMMA.
Sealing	Apply using a sealant applicator gun or spatula. Avoid trapping air bubbles. The final seal is achieved after all the volatile materials have evaporated. Evaporation rate depends on the temperature and joint size. When used with EPDM foils, some wrinkling of the foil may occur. This effect is reversed after a short time.
Storage	Do not store at temperatures below +5°C or above +25°C. When stored in unopened containers at recommended temperatures, usable for up to 12 months.
Cleaning	Clean tools and remove fresh spots with Körasolv PU.

For safety information refer to the Material Safety Data Sheet

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖDISIL HAC - KÖDISIL N

ELASTIC ONE COMPONENT SILICONE SEALANTS

For sealing in the manufacture of containers, vehicles, trucks, vans, caravans and sales vehicles.

Base	Neutral curing silicone rubber, one component, vulcanizing under the influence of humidity
Properties	Ködisil HAC and Ködisil N contain some additives which either prevent fungal attack on a long-term basis or delay its occurence considerably. The vulcanized compound is resistant to temperatures from -40°C to +180°C. Good resistance to weathering and ageing; resistant to many solvents, oils, fuels, water, some acids, detergents.
Movement capacity	Approx. 25 %

Sealing against water with Ködisil HAC

Sealing sanitary ware with Ködisil N

	KÖDISIL HAC	KÖDISIL N
	for use in sanitary engineering and humid premises, e. g. for joints between steel or enamel bathtubs and basins and wall tiles in bathrooms and washrooms.	*Self-vulcanizing, glazing silicone, neutral curing, for a wide range of applications. Highly resistant against humidity and normal climatic and environmental effects*
Colour	Transparent	White, transparent
Density	1,03 g/cm³	1,27 g/cm³ (white), 1,02 g/cm³ (transparent)
Hardness Shore-A	17	23 (white) 19 (transparent)
Skin time	10 minutes	approx. 5 minutes
Packaging	310 ml PE-cartridge 400 ml sausages 600 ml sausages	310 ml PE-cartridge 400 ml sausages 600 ml sausages

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖDISIL HAC - KÖDISIL N

Preparation	The joints must be clean, dry and free from dust and grease. Körasolv GL can be used for degreasing non-porous surfaces such as glass and metal. Please contact our Technical Department for advice if the product is to be used with plastics such as Polycarbonate and PMMA.
Sealing	Apply the sealant directly from the cartridge using a sealant applicator gun and ensure that complete contact is made with the substrates. Care should be taken to avoid trapping air within the sealant. Select a tool to suit the width of the joint and wet it with clean water containing a little detergent. Working upwards in the case of vertical joints, lightly tool the sealant into the joint. This will improve adhesion, reduce air content and enhance the appearance of the finished joint. If masking tape was used, it should be carefully removed, ensuring that it is not dragged against the face of the joint.
Joint dimensions	The joints to be sealed should be at least 4 mm wide and 4 mm deep. For joint widths up to approx. 5 mm, a joint with a square cross-section is most suitable. For wider joints the joint depth should be at least half the joint width (but not more than 15 mm). Prior to sealing, a stable, non-absorbent insert material is to be pressed into the joint. This insert material which should possibly be convex, e. g. polyethylene foam, is to be inserted in such a way that the adhesion surface on the joint flanks is as large as possible (see also German DIN standard 18 540). It is recommended to cover the edges of the gap with self-adhesive tape in order to ensure a clean and straight joint. Triple surface adhesion is to be avoided.
Storage	Do not store at temperatures below +10°C or above +25°C. When stored in unopened containers at recommended temperatures, usable for up to 9 months.
Cleaning	To clean tools and remove fresh spots use Körasolv GL.

For safety information refer to the Material Safety Data Sheet

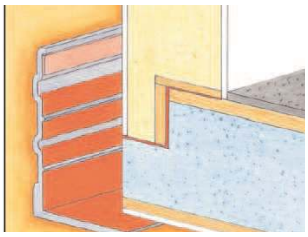
KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRATAPE AT 3 - KÖRATAPE MTC

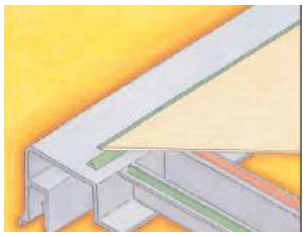
ACRYLIC TAPES

Köratape is designed for use in a wide variety of industrial and construction applications to replace mechanical fasteners and welds. Typical applicatons include automotive trim attachment, trailer skin-to-frame assembly, signs, graphics, furniture, appliance, and electrical component assemblies.

Base	Acrylic
Thickness	0,64 mm to 2,03 mm
Width	6,35 mm to 457,2 mm
Service temperature	-35°C to 90°C



Use of Köratape as an assembly aid



Use of Köratape as an assembly aid

	KÖRATAPE AT 3 *Acrylic tape with solid acrylic core*	KÖRATAPE MCT *Acrylic tape with microcellular acrylic core*
Colour	Translucent	White, grey, black
Tensile strength	1,4 MPa	0,76 MPa
Elongation	500 %	700 %
Peel strength	2,63 N/mm	3,5 N/mm
Packaging	on request	on request

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRATAPE AT 3 - KÖRATAPE MCT

Application temperature	10°C to 35°C
Preparation	The substrate to be bonded should be cleaned with an appropriate solvent, preferably Isopropanol no more than 15 minutes prior to bonding of acrylic adhesive backed part. To ensure removal of all contaminants without leaving any residue, use a clean, lint-free wiping cloth or disposable wipe (never recycled rags). Other solvents such as hexane, heptane or alcohol may be suitable for cleaning various substrates after thorough evaluation. The substrate must be thoroughly dry through evaporation of the solvent with radiant heat, hot air dryers or with time before bonding acrylic adhesive backed parts. Ensure optimum substrate temperature, never below 15°C at application time. Ensure application temperature of 10°C to 35°C.
Application Instructions	Remove the protective release liner from the acrylic tape immediately prior to applying the part to be bonded, being careful not to contaminate the acrylic adhesive. Apply within 15 minutes after the adhesion promoter has been applied. Apply the part to be bonded without entrapping air between the tape and the substrate with a recommended minimum application pressure of 2.7 kg/cm of tape width to achieve adhesive to substrate contact and maximum bond strength.
Storage	Two years minimum from date of manufacture (at 20°C/50% rel. humidity).
Cleaning	Use Körasolv CR, GL or WL

For safety information refer to the Material Safety Data Sheet

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRAPUR 689 - KÖRAPOX BS 85

SELF LEVELLING PU BASE COAT AND EPOXY TOP COAT

For coating floors of lorries, containers, mobile shops, caravans, mobile homes etc.
Can be used on polyester, aluminium, primed steel sheets and wood. Particularly suitable for vehicles carrying fresh foods, meat, fish and refrigerated vehicles (approved to -30°C). Can be used in contact with foodstuffs. Certification is available.
To create a non slip surface, carborundum granules can be sprinkled on and sealed the following day by using Körapox BS 85 A & B.

Colour	Grey

Floor coating with Körapur 689

Sealing the granulated material with Körapox BS 85

	KÖRAPUR 689 *Good self levelling*	KÖRAPOX BS 85 *Good resistant to UV and water*
Base	Two component polyurethane, solvent free	Two component epoxy resin, containing solvents
Density	1,40 g/cm³ (mixed)	1,14 g/cm³ (mixed)
Viscosity	3.600 mPas (mixed)	low viscosity
Mix ratio	4 : 1 by weight	4 : 1 by weight
Coverage	3-5 kg/m²	250-400 g/m²
Pot life	35 minutes at 20°C	8 hours at 20°C
Tensile strength	18 N/mm²	not applicable
Elongation at break	15 %	not measured
Hardness Shore D	70	not measured
Characteristics	Tough, with good resistance to abrasion. Approved to EN 438	Tough, good resistance to water and abrasion, salt, oil
Packaging units	15 kg mixing unit in stacked container	5 kg mixing unit in stacked container

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRAPUR 689 - KÖRAPOX BS 85

Application temperature	+15°C to +25°C
Coating	See separate leaflet for Processing Instructions
Storage	Do not store at temperatures below 5°C or above 25°C. Usable for up to 12 months when stored in unopened containers at recommended temperatures.
Cleaning	Clean tools immediately after use with Körasolv PU . Cured material can only be removed mechanically.

	KÖRAPUR 689	KÖRAPOX BS 85
Preparation	This product is only suitable for use on horizontal surfaces, which must be clean, dry and free from dust and grease. The substrates must be properly prepared to ensure good adhesion. Uncoated wooden sheets must not exceed 8-12% moisture content. Previously coated surfaces should be abraded to proved a key for the new coating. Sheets should be joined by tongue and groove and, preferably, bonded. If necessary glass fibre cloth should be placed over the joint to prevent cracking of the top coat. Fill any large holes with e. g. Körapur 666 prior to application of the screed. GRP surfaces which may contain release agents such as paraffin waxes should be thoroughly abraded to remove the surface and ensure good adhesion. Stainless steel and aluminium should be degreased, abraded and primed. When repairing older floors particular care must be given to the pre-treatment of the substrate. Good results can be achieved with sand blasting.	The surfaces must be clean, dry (no more than 14% moisture) and free from grease. Any contaminants must be completely removed, if necessary, by shot blasting. When using as afloor coating for utility vehicles, the excess aggregate can be swept away once the base coat has cured. Afterwards, a second top coat of Körapox BS 85 can be applied within 24 hours. Since the aggregate is well embedded in the coating, this kind of floor covering will provide resistance to abrasion from forklift wheels.

For safety information refer to the Material Safety Data Sheet

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRAPUR 690 - KÖRAPOX BS 90

NON-SLIP FLOOR COATINGS

For non-slip sealing of coated floors in lorries, containers, mobile shops, caravans, etc.
Particularly suitable for fresh food, meat and fish vehicles as well as refrigerating vehicles (tested up to -30%).
Safe for contact with foodstuffs. Test certificate available.

Properties	Hard-wearing, tough, good resistance to UV, water and salt
Open time	30 minutes
Colour	Grey

Applying Körapur 690

Covering the hydraulic platform with Körapox BS 90

	KÖRAPUR 690 *Good resistance to UV*	KÖRAPOX BS 90 *Good adhesion to metal*
Base	Two component polyurethane	Two component epoxy resin
Density	1,60 g/cm³ (mixed)	1,55 g/cm³ (mixed)
Viscosity	33.000 mPas (mixed)	35.000 mPas (mixed)
Mix ratio	3 : 1 by weight	7 : 1 by weight
Coverage	600-800 g/m²	800-1.000 g/m²
Pot life	120 minutes	8 hours at 20°C
Packaging units	6 kg mixing unit in stacked container	8 kg mixing unit in stacked container

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRAPUR 690 - KÖRAPOX BS 90

Application temperature	+15°C to +25°C
Coating	See separate leaflet for Processing Instructions
Storage	Do not store at temperatures below 5°C or above 25°C. Usable for up to 12 months, when stored in unopened containers at recommended temperatures.
Cleaning	Clean tools immediately after use with Körasolv PU. Cured material can only be removed mechanically.

	KÖRAPUR 690	KÖRAPOX BS 90
Preparation	The surfaces must be clean, dry and free from dust and grease. The substrates must be properly prepared to ensure good adhesion. This includes mechanical and / or chemical pre-treatment where necessary. Not suitable for sealing flexible substrates like wood. When repairing older floors particular care must be given to the pre-treatment of the substrate. Good results can be achieved with sand blasting.	The surfaces must be clean, dry and free from dust and grease. The substrates must be properly prepared to ensure good adhesion. This includes mechanical and / or chemical pre-treatment where necessary. Galvanised and aluminium surfaces should be well abraded. Not suitable for sealing flexible substrates such as wood. When repairing older floors particular care must be given to the pre-treatment of the substrate. Good results can be achieved with sandblasting.

For safety information refer to the Material Safety Data Sheet

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRASOLV GL - PR - PU - WL

CLEANERS AND DILUANTS

	KÖRASOLV GL	KÖRASOLV PR	KÖRASOLV PU	KÖRASOLV WL
Application	Mild cleaner for removing grease. Particularly suitable for cleaning glass	Very strong cleaner for old floors. Also recommended for coated steels	General purpose cleaner for tools and surfaces	Mild cleaner for greasy and waxy surfaces. Particularly suitable for the removal of mould release waxes from GRP
Base	Mixture of organic solvents, toluene free	Mixture of organic solvents, toluene free	Mixture of organic solvents, toluene free	Mixture of organic solvents, toluene free
Density	0,79 g/cm³	0,90 g/cm³	0,81 g/cm³	0,80 g/cm³
Packaging	1 litre	1 litre 12,5 litre	1 litre 5 litre 12,5 litre	1 litre

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖRABOND HG 74 - HG 77 - HG 81

PRIMERS AND ADHESION PROMOTERS

For surface preparation prior to bonding with 1- and 2-k PU systems and MS adhesives and sealants. The use of primers improves adhesion and moisture resistance of the bond. Users are advised to confirm the suitability of the products through their own tests.

Base	Synthetic resin, containing solvents		
Viscosity	Low viscosity		
	KÖRABOND HG 74 *Moisture curing primer*	KÖRABOND HG 77 *One component primer*	KÖRABOND HG 81 *Bonding agent*
Colour	Light yellowish, transparent	Colourless, transparent	Dark yellow, transparent
Density	1 g/cm³	0,92 g/cm³	0,8 g/cm³
Coverage	100 g/m²	40-80 g/m²	20-40 g/m²
Drying time	60 minutes	30 minutes	30 minutes
Application	For the pretreatment of porous substrates, for example wood prior to bonding with 1- and 2-k PU's and MS adhesives and sealants.	Primer for pretreatment of rigid PVC and ABS prior to bonding with e. g. Körapur or Körapop.	For the pretreatment of non-porous substrates, for example metals (aluminium, steel, brass, copper, zinc, tin), plastics (ABS, PVC-rigid, PA, SMC, GRP, PUR), varnished surfaces, enamel, ceramics as well as laminated glass prior to bonding with 1- and 2-k polyurethanes and MS adhesives and sealants.
Packaging units	500 g tin (carton of 10 tins)	1 litre tin (cartons of 10 tins)	1 litre tin (cartons of 10 tins)

KÖMMERLING

KÖMMERLING CHEMISCHE FABRIK GMBH

PRODUCT INFORMATION

KÖRABOND HG 74 - HG 77 - HG 81

Application temperature	+10 to +25°C
Preparation	The surfaces must be dry, clean and free of dust and grease.
Storage	Keep containers tightly closed. Do not store below 10°C or for more than 12 months.

	KÖRABOND HG 74	KÖRABOND HG 77	KÖRABOND HG 81
Preparation	Apply Körabond HG 74 by brush or roller to the surfaces to be bonded and allow to dry. The adhesive or sealant should be applied to the primed surface within 8 hours of application of the primer to ensure maximum adhesion, otherwise fresh primer must be applied.	Apply Körabond HG 77 by brush or roller to the surfaces to be bonded and allow to dry. The adhesive or sealant should be applied to the primed surface within 24 hours of application of the primer to ensure maximum adhesion, otherwise fresh primer must be applied.	The surfaces must be dry, clean and free from dust and grease. Apply Körabond HG 81, by cloth, to the surfaces to be bonded and allow to dry. The adhesive or sealant should be applied to the primed surface within 24 hours of application of the primer to ensure maximum adhesion, otherwise fresh primer must be applied. Users are required to confirm the compatibility and suitability of the product through their own tests.

For safety information refer to the Material Safety Data Sheet

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

KÖMMERLING - MORE THAN JUST A PRODUCT

Our philosophy ...

... more research and development!

We have the solutions for tomorrow's requirements today.

... more products!

We have the widest product-range in the market.

... more logistics!

We help to save your time.

... more consulting and training!

We increase your benefit, your certainty and your income return.

... more service!

We are there when you need us.

... more communication!

We are active in building-up your market.

... more quality!

We offer you high performance products.

KÖMMERLING
KÖMMERLING CHEMISCHE FABRIK GMBH

Kömmerling Chemische Fabrik GmbH
Postfach 2162
D-66929 Pirmasens
Germany
0049 6331 562188 phone
0049 6331 561999 fax
e-mail: klebstoffe@koe-chemie.de

Kommerling UK Limited
27 Riverside Way, Uxbridge
Middlesex UB8 2YF
England
00-44-1895-465-600 phone
00-44-1895-465-617 fax
e-mail: enquiries@adcostag.co.uk

Kömmerling Chimie Sarl
Departement mastics vitrage isolant
51, rue Pierre BP 310
F-92111 Clichy Cedex
0033 147 153896 phone
0033 147 153894 fax
e-mail: klebstoffe@koe-chemie.de

ADCO Products, Inc.
4401 Page Avenue
P.O. Box 457
Michigan Center, MI 49254
001.800.248.4010 phone
001.517.764.6697 fax
e-mail: info@adcocorp.com