# COSMO® Adhesives

Permanent solid bonding





# **Together toward success**

#### A strong partner



Quality, service and high delivery reliability are the basic pillars of the success of our group of companies. We have continuously improved and further developed our portfolio in the last years; this also includes the acquisition of new companies. By now, about 325 employees at four sites participate in the success of our group.









#### Company

By pooling the core competences of our business segments of adhesives and sandwich panels under a single roof, we are able to from a small hide-glue producer to an internationally acting, inoffer solutions from one source to our customers that are efficient and of high technical quality.

We are among the leading manufacturers in these two business segments in Europe and moreover, we also increasingly sell our products outside of Europe, such as in China, Russia and the USA.

#### **Company history**

Since the company's foundation in 1815, Weiss has developed dustrial company for modern adhesive systems and composite panels. With a passion for quality and the aspiration to meet our customers' high expectations, we are a recognised and reliable partner on the market.

# Powerful product range

**Business** area **Adhesives** 



#### **Durably firm joints**

Traditional joining technologies like riveting, soldering, welding, or screwing, will increasingly be replaced by modern adhesive systems, resulting in many advantages.

Our product range includes more than 400 variants of surface and construction adhesive and superglues, as well as special adhesives for a wide variety of applications.

#### **Business** area **Composite panels**



#### **Unlimited possibilities for design**

Our range of products includes more than 5,000 variants of composite panels. Because there is a large number of top coats and core materials available as well as the possibility of combining and processing them in many different ways, a vast number of creative designs results for the finished element.

#### **PUDOL** Cleaning and care agent



#### Cleanliness refreshes your senses

PUDOL stands for convincing quality of special products in the field of commercial cleaning. In addition to a complete range of cleaning and care products for different applications, we are offering a comprehensive service with interesting solutions and benefits.



A subsidiary of the Weiss Group

Weiss is the only enterprise that produces adhesives and composite panels.

# **COSMO®** Adhesives

#### **Durably firm joints**

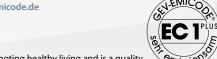




#### Certifications

#### Low-emission adhesives from Weiss / www.emicode.de

## **GEV-EMICODE®-licensed products**



EMICODE® is a recognised standard for construction products (adhesives, amongst others) promoting healthy living and is a quality label for the proof of low VOC-emissions. Products labelled with EMICODE® are modern, solvent-free and low-emission construction

#### The "DIN-certified bio-based" label /

A neutral and transparent quality label regarding the content of bio-based carbon and the product quality makes finding resource-efficient products easier. By using the "DIN-certified bio-based" label, it is certified that we use bio-based raw materials and undergo regular monitoring.



# Our competencies in adhesive technology

More than 200 years of experience



#### **Durably firm joints**

Traditional joining technologies like riveting, soldering, welding, or screwing, will increasingly be replaced by modern adhesive systems, resulting in many advantages.

Our product range includes more than 400 variants of surface adhesive and construction adhesive and special adhesive for a wide variety of applications.

#### Our adhesive systems & cleaning agents





















#### Fields of application

Weiss is offering highly loadable adhesive systems for the most diverse fields of application. With the help of our adhesives, you ensure the required high quality of your product and achieve strengths that guarantee safe and durable bonding of your adherends also under extreme loads.



Window construction

Door construction



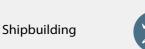
Automotive manufacturing



Industry



Airtight bonding







Fire protection





Advertising industry



## **Application engineering**

It is very important to us to provide professional and innovative solutions with convincing advantages for production methods and with high efficiency in close cooperation with our customers. A team of chemists and application engineers with long-term experience in development, modification and application of adhesives will be on hand with help and advice for you.



#### **Customer-specific** solutions

Our standard range of products consists of more than 400 types of adhesive for the most diverse applications. If, however, the suitable adhesive should not be available for you, we are offering a very special service. We are able to develop adhesive systems that will be customized with 100 % to your individual bonding tasks.



#### Private label / individual layout

We would also like to produce and finish our products in accordance with your individual layout. We are offering special flexibility as well as long-term experience and respond with sensitivity on your wishes. Your own brand can profit from the high quality and reliability of our products.

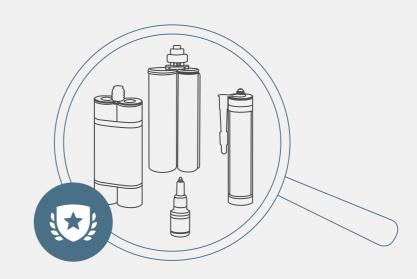
#### **Certified** quality

Our own quality tests as well as our cooperation with various testing institutes ensure the high quality of our products. We are working together with the following testing institutes:

- AWOK, Kaiserslautern
- DMT, Dortmund
- eco, Cologne
- · Eurofins, Denmark
- · Exova, Frankfurt
- · FH Bielefeld
- · IBP, Stuttgart
- · IFAM, Bremen
- · ift, Rosenheim
- ISEGA, Aschaffenburg
- Kiwa, Flörsheim

ILAK, Wettenberg

- · MPA, Braunschweig
- TU, Berlin



# **COSMO® PU Polyurethane Adhesives**Adhesives for extreme conditions



#### **Design & assembly**

Due to their wide range of application possibilities, our one- and two-component-PUR adhesive systems are suitable for bonding of the most different materials and therefore, they are used in various industrial areas for structural bonding as well as for the assembly by the building industry and craftsmen.

#### **Examples for application**

- 1 Universal assembly bonding in industry and craftsmanship
- 2 Aluminium window and door construction for bonding of corner joints
- 3 Structural, force-locking bonding in the field of vehicle body manufacturing
- 4 High-strength bonding of mitre cut surfaces of PUR window and door profiles
- 5 Hard pointing of wall elements (wall cladding)
- Joint bonding of sheets of PUR-recycled material, gypsum fibre boards, cement chipboards and floor tiles
- Bonding of isolation and insulation panels
- 8 Fixation of struts for double floorings
- 9 Laying of skirting and laminate
- 10 Construction and renovation of stairs
- 11 Fixation of designation labels, coverings and linings
- 12 Kitchen work desks made of natural stone and composites for the bonding of substructures
- 13 Bonding of natural stone and tiles
- 14 Structural bonding in the field of wood processing
- 15 Board joint bonding of panels in the field of wood, window and front door construction
- 16 Overlapping joints of underroof, underlay, roof underlay and façade sheets
- 17 Sealing of underroof sheets, underlays, roof-underlays and façade-sheets in the area of nails staples
- 18 Structural bonding in shipbuilding



1 component	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Particularities
COSMO® PU-100.110	•	•						•	•	•	•				•				Assembly professional
COSMO® PU-100.120																•	•		Windtight
COSMO® PU-100.130	•	•								•									Metal pro
COSMO® PU-100.250	•							•	•	•				•	•				Powerful
COSMO® PU-100.260						•	•												Living room specialist
COSMO® PU-100.310	•	•								•					•				High-strength
COSMO® PU-100.380	•									•									Multifunctional
COSMO® PU-160.110														•					Wood professional - powerful
COSMO® PU-160.180														•					Wood professional - flowable
COSMO® PU-160.190														•					Wood professional - fast
COSMO® PU-160.230																	•		Rain-resistant
COSMO® PU-180.120	•	•		•						•					•				Slow
COSMO® PU-180.150	•	•								•					•				colourless
COSMO® PU-190.110	•	•								•					•				Fibre-reinforced
2 components																			
COSMO® PU-200.120		•								•		•	•						Fast strengths
COSMO® PU-200.180			•							•								•	Allrounder, hardly inflammable
COSMO® PU-200.280		•	•			•													Window construction
COSMO® PU-200.310		•	•											•					Window construction, fast!
COSMO® PU-200.334		•	•																Transportation specialist
COSMO® PU-200.350		•	•		•														Wall cladding, free from H351
COSMO® PU-200.500		•	•																Window construction, training-free
COSMO® PU-200.900		•	•		•														Bio-based, free from H351
COSMO® PU-200.910			•							•								•	biobased, allrounder

#### **Examples of materials**



6

# COSMO® PU Polyurethane Adhesives Adhesives for extreme conditions





# 1-component adhesives for construction & assembly

Adhesive system	Film property	Foaming	Viscosity +20 °C	Skinning time +20 °C dry [min]	Pressing time +20 °C [min]	Tensile shear strength +20 °C [N/mm²]
COSMO® PU-100.110	Tough-elastic	Low	Medium pasty	5	15	11
COSMO® PU-100.120	Tough-elastic	Low	Medium pasty	7	-	16
COSMO® PU-100.130	Tough-elastic	Medium	Medium pasty	7	20	12
COSMO® PU-100.250	Tough-hard	Low	Medium pasty	3	10	14
COSMO® PU-100.260	Semi-hard	Strong	Lowpasty	60	240	17
COSMO® PU-100.310	Semi-hard	Medium	Lowpasty	20	75	19
COSMO® PU-100.380	Semi-hard	Low	Lowpasty	90	240	18
COSMO® PU-160.110	Tough-hard	Medium	4,500 mPa.s	35	90	13
COSMO® PU-160.180	Tough-elastic	Medium	3,900 mPa.s	25	60	9
COSMO® PU-160.190	Tough-hard	Medium	3,650 mPa.s	10	20	13
COSMO® PU-160.230	Elastic	Medium	1,500 mPa.s	12	-	13
COSMO® PU-180.120	Tough-elastic	Medium	Lowpasty	18	300	14
COSMO® PU-180.150	Semi-hard	Medium	Lowpasty	10	30	14
COSMO® PU-190.110	Semi-hard	Low	Lowpasty	7	20	12

# 2-component adhesives for construction & assembly

Adhesive system	Film property	Viscosity +20 °C	Pot life +20 °C [min]	Pressing time +20 °C [min]	Tensile shear strength +20 °C [N/mm²]	Shore hardness [Shore D]
COSMO® PU-200.120	Tough-hard	Low-pasty	5	20	22	85
COSMO® PU-200.180	Tough-elastic	Medium pasty	115	420	13	50
COSMO® PU-200.280	Tough-hard	Low-pasty	60	360	18	85
COSMO® PU-200.310	Tough-hard	Low-pasty	20	90	18	85
COSMO® PU-200.334	Semi-hard	Low-pasty	50	300	19	65
COSMO® PU-200.350	Tough-hard	Low-pasty	30	180	20	80
COSMO® PU-200.500	Tough-hard	Low-pasty	23	150-180	17	73
COSMO® PU-200.900	Tough-hard	Low-pasty	25	180	13	80
COSMO® PU-200.910	Tough-elastic	Medium pasty	120	300	10	50

Emicode EC 1 <sup>PLUS</sup>	<b>Bio-based</b> DIN-tested	Wood bonding D4 + Watt 91	Steering wheel	Colours	Packages
		D4 + Watt 91		beige	310 ml cartridge, 600 ml bag, 200 l drum
				beige	310 ml cartridge, 600 ml bag
		D4		white, black, grey	310 ml and 1,000 ml cartridge, 600 ml bag
		D4 + Watt 91		beige	310 ml cartridge, 600 ml bag
✓				beige	310 ml cartridge, 600 ml bag
		D4		opaque	310 ml cartridge
				beige	310 ml cartridge, 600 ml bag
		D4 + Watt 91		brown	500 g bottle, 5 and 10 kg canister, 220 kg drum
				brown, red	500 g bottle, 10 kg canister, 220 kg drum
		D4 + Watt 91		brown	10 kg canister, 220 kg drum
				beige, grey	500 g and 1,000 g bottle
				opaque, transpar- ent-brown	310 ml and 1.000 ml cartridge
				opaque	310 ml cartridge
		D4 + Watt 91		opaque	310 ml cartridge, 600 ml bag

<b>Emicode</b> EC 1 <sup>PLUS</sup>	<b>Bio-based</b> DIN-tested	Steering wheel	Colours	Packages
			oyster-white, black	2 x 310 ml tandem cartridge
✓		✓	beige	5.7 l bucket, 200 l drum, 500 ml bottle, 10 l canister
			beige, white, grey	2 x 190 ml & 2 x 310 ml tandem cartridge
			ivory	2 x 310 ml tandem cartridge
			graphite grey	2 x 190 ml tandem cartridge
			white	2 x 310 ml tandem cartridge
			beige	2 x 190 ml & 2 x 310 ml tandem cartridge
	✓		white	2 x 310 ml tandem cartridge
✓	✓	✓	beige	5.7 l bucket, 200 l drum

# **COSMO® PU Polyurethane Adhesives**

#### Adhesives for extreme conditions





To support you with the suitable adhesive in your individual production process when it has to do with surface bonding, we have developed a wide variety of systems with the most different properties referring viscosity, thixotropy, processing and pressing times.



## **Examples for application**

**Automotive manufacturing** (roof lining, walls, floors & doors)

Refrigerated vehicle Truck trailer Motor caravan



















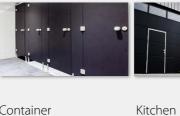


Delivery van

Composite panels in the following areas

Balustrade	façade	Partition panel
Panel	Stand construction	Container











Composite panels

Door

16	-	
		A



1 component	1	2	3	Particularities	
COSMO® PU-125.110	•	•	•	Hardly inflammable	Low calorific value with 16 MJ/kg
COSMO® PU-160.120	•		•	High-strength	High strengths, long open time
COSMO® PU-160.160	•	•	•	Elastic	Elastic adhesive joint, medium process time
COSMO® PU-160.180	•		•	Fast	Tough-elastic bonding joint, fast process time
COSMO® PU-160.190	•		•	High-strength	D4 adhesive, wood professional
COSMO® PU-160.260	•	•	•	Strongly foaming	Mineral wool specialist, hardly inflammable
COSMO® PU-160.400	•		•	Highly viscous	Prevents penetration of adhesive
COSMO® PU-160.440	•		•	Slow	Very long skinning time
COSMO® PU-160.530	•		•	Plastics professional	Adheres to a very wide variety of substrates
COSMO® PU-160.540	•		•	Fast	Very short process times, can be activated by heat
COSMO® PU-170.110	•		•	Fibre-reinforced	Very high tensile shear strengths, fibre-reinforced adhesive, compensates force peaks
2 components					
COSMO® PU-200.180	•	•	•	Versatile	Wide range of substrates, versatile application
COSMO® PU-200.910	•	•	•	Versatile	Very good adhesion spectrum, bio-based
COSMO® PU-220.120	•		•	High-strength	High tensile shear strengths, tough-hard
COSMO® PU-220.150	•		•	Vehicle professional	Medium pot life for special automotive manufacturing
COSMO® PU-220.160	•		•	Allrounder	Good tensile shear strengths, good impact resistance
COSMO® PU-220.180	•		•	Slow	Long pot life & processability
COSMO® PU-220.260	•		•	Price-conscious	Long pot life & price efficiency
COSMO® PU-220.400	•		•	Specialist	Plastics professional
COSMO® PU-220.900	•	•	•	Hydrophobic	Slightest foaming, water-repellent, bio-based

#### **Examples of materials**





# COSMO® PU Polyurethane Adhesives Adhesives for extreme conditions







Adhesive system	Film property	Foaming	<b>Viscosity</b> [mPa.s]	Skinning time Wet [min]	Pressing time +20 °C [min]	Tensile shear strength +20 °C [N/mm²]
COSMO® PU-125.130	Tough-hard	Low-medium	5.000	27	200	11
COSMO® PU-160.120	Tough-hard	Medium	4,700	50	240	13
COSMO® PU-160.160	Tough-elastic	Medium	3,500	25	120	9
COSMO® PU-160.180	Tough-elastic	Medium	4,200	12	60	9
COSMO® PU-160.190	Tough-hard	Medi- um-strong	4,500	5	20	13
COSMO® PU-160.260	Tough-hard	Strong	8,500	16	60	10
COSMO® PU-160.400	Tough-elastic	Medium	9,000	24	50	9
COSMO® PU-160.440	Tough-elastic	Low-medium	4,000	75	480	5
COSMO® PU-160.530	Elastic	Low-medium	6,500	40	240	6
COSMO® PU-160.540	Tough-elastic	Medium	3,800	9	20	8
COSMO® PU-170.110	Tough-elastic	Low-medium	3,000	50	90	15

## 2-component adhesives for surface bonding

Adhesive system	Film property	<b>Viscosity</b> [mPa.s]	Pot life +20 °C [min]	Pressing time +20 °C [h]	Tensile shear strength +20 °C [N/mm²]	<b>Mixing ratio</b> Binder: Hardener
COSMO® PU-200.180	Tough-elastic	Medium pasty	115	7	13	100:15
COSMO® PU-200.910	Tough-elastic	Medium pasty	120	5	10	100:17
COSMO® PU-220.120	Tough-hard	3,000	40	2.5	22	100:26
COSMO® PU-220.150	Semi-hard	3,000	100	5	16	100:20
COSMO® PU-220.160	Semi-hard	3,000	75	4	16	100:20
COSMO® PU-220.180	Elastic	3,100	480	16	6	100:16
COSMO® PU-220.260	Elastic	3,100	480	16	6	100:16
COSMO® PU-220.400	Elastic	2,600	300	16	4	100:16
COSMO® PU-220.900	Tough-hard	5,000	130	7	15	100:19



Shore hardness [Shore D]	Emicode EC 1 <sup>PLUS</sup>	<b>Bio-based</b> DIN-tested	Steering wheel	Colour	Packages
50	✓		✓	beige	5.7 l canister, 200 l drum
50	✓	✓	✓	beige	5.7 l canister, 200 l drum
85				beige	31.5 l hobbock, 200 l drum
65				beige	200 l drum, 1,000 l container
65				beige	200 l drum, 1,000 l container
45				beige	13.2 l bucket, 31.5 l hobbock, 200 l drum, 1,000 l container
45				beige	1,000 l container
30				beige	1,000 I container
60		✓	✓	white	200 l drum, 1,000 l container

# **COSMO® HD Hybrid Polymer Adhesives**

#### **Environment-oriented bonding & sealing**



### **Hybrid-polymer adhesives**

This new generation of adhesives and bonding sealants has been developed on the basis of alternative raw materials. In contrast to conventional PUR construction and assembly adhesives, whose content materials are subject to labelling as per Ordinance on Hazardous Substances, we are offering the COSMO®S HD alternative system for the consequent, environment-ori-

#### Structural bonding in automotive manufacturing



Truck trailer

Motor caravan

Trailer



Refrigerated vehicle





Ambulance

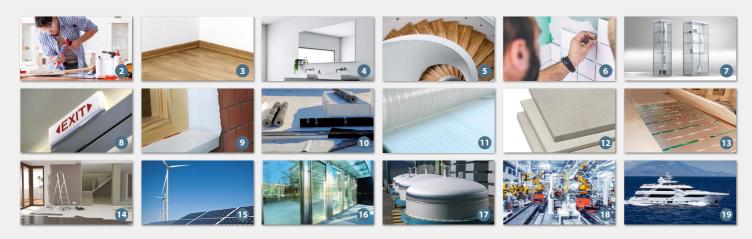








### Other fields of application



- Bonding and sealing in automotive manufacturing
- Assembly bonding
- Skirting, laying of laminate and cable ducts
- Mirror bonding
- Stair construction and building trade
- Tile repair
- Glass bonding
- Fixation of signs
- Bonding and sealing of joint tapes
- Bonding of EPDM films and profiles

- Bonding of façade composite panels
- Doubling of dry screed elements
- Surface bonding of glass-fibre wall-papers or wood floorings
- Dry finish and interior finishing
- Solar and wind power plants
- Window and door construction
- Apparatus and plant construction
- Diverse industrial fields
- Shipbuilding

Sealing adhesives	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Particularities
COSMO® HD-100.400	•	•	•	•	•	•	•	•			•			•	•	•	•	•	(•)	Versatile
COSMO® HD-100.470	•	•	•		•		•	•			•			•	•		•	•		Fast
COSMO® HD-100.800	•	•	•	•	•	•	•	•						•		•	•	•		Powerfull
Bonding sealants																				
COSMO® HD-150.160	•	•	•				•	•		•							•	•		Transparent
COSMO® HD-100.600	•								•	•						•	•	•		Sealing
Elastic assembly adhesives																				
COSMO® HD-100.110	•	•	•				•	•			•	•	•	•	•			•	•	Hardly inflammable
COSMO® HD-100.170	•	•	•		•		•	•			•							•		Fast
COSMO® HD-100.220	•	•	•		•		•	•			•			•			•	•		Powerful
COSMO® HD-100.500	•	•	•		•		•	•	•		•						•	•		High tensile shear strength
COSMO® HD-100.510									•											Window joint tape professional
COSMO® HD-200.101	•	•	•		•	•	•	•			•			•	•	•	•	•	(•)	Controlled
COSMO® HD-200.121	•	•	•		•	•	•	•			•			•	•	•	•	•	(•)	Controlled
COSMO® HD-200.201	•	•	•		•		•	•			•			•	•	•	•	•		Controlled
Elastic surface adhesive																				
COSMO® HD-120.110										•		•	•	•						Surface specialist

• Suitable (•) Of limited suitability

#### **Examples of materials**



For pre-treatment we recommend our activator COSMO® CL-310.110 (p. 26)

# **COSMO® HD Hybrid Polymer Adhesives**

Environment-oriented bonding & sealing





Sealing adhesives

Adhesive system	<b>Viscosity</b> [mPa*s]	Skinning time [min]	Shore hardness	Tensile shear strength +20 °C [N/mm²]	Breaking elongation %
COSMO® HD-100.400	600,000	12	55	3.1	350
COSMO® HD-100.470	600,000	5	50	2.8	350
COSMO® HD-100.800	1.200.000	6	74	3,0	130

No marking required and solvent-free	Emicode EC 1 <sup>PLUS</sup>	Food industry ISEGA	Sealing ETAG 022	Steering wheel IMO FTPC	Colours	Packages
✓	✓	✓	✓		white, black, grey	310 ml cartridge, 600 ml bag
✓			✓		white	310 ml cartridge, 600 ml bag
✓	✓				white, beige, black	290 ml cartridge, 600 ml bag

Bonding sealants

Adhesive system	<b>Viscosity</b> [mPa*s]	Skinning time [min]	Shore hardness	Tensile shwear strwength +20 °C [N/mm²]	Breaking elongation %
COSMO® HD-150.160	300,000	10	36	2.3	230
COSMO® HD-100.600	250,000	15	30	2.3	500

No marking required and solvent-free	Emicode EC 1 <sup>PLUS</sup>	Food industry ISEGA	Sealing ETAG 022	Steering wheel IMO FTPC	Colours	Packages
✓					transparent	310 ml cartridge
✓			✓		white, black, grey	310 ml cartridge, 600 ml bag

# Elastic assembly adhesives

Adhesive system	<b>Viscosity</b> [mPa*s]	Skinning time [min]	Shore hardness	Tensile shear strength +20 °C [N/mm²]	Breaking elongation %
COSMO® HD-100.110	75,000	9	72	4.5	75
COSMO® HD-100.170	300,000	4	72	4.0	75
COSMO® HD-100.220	2,400,000	5	70	4.5	130
COSMO® HD-100.500	100.000	9	72	2.0	135
COSMO® HD-100.510	580.000	13	34	1,2	250
COSMO® HD-200.101	150,000	30	63	4.0	250
COSMO® HD-200.121	215.000	11	63	3,5	280
COSMO® HD-200.201	170,000	40	48	2.0	270

No marking required and solvent-free	Emicode EC 1PLUS	Food industry ISEGA	Sealing ETAG 022	Steering wheel IMO FTPC	Colours	Packages
✓	✓			✓	white	310 ml cartridge, 600 ml bag
✓					white	310 ml cartridge, 600 ml bag
✓	✓				white	310 ml cartridge, 600 ml bag
✓	✓				white	310 ml cartridge, 600 ml bag
✓	✓				creme white	600 ml bag
✓	EC 2		✓		white, grey	195 ml uTAH cartridge, 400 ml s.b.s. cartridge
✓	EC 2		✓		grey	195 ml uTAH cartridge, 400 ml s.b.s cartridge
✓					grey	2 x 310 ml tandem cartridge

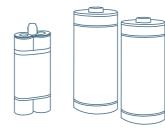
# Elastic surface adhesive

Adhesive system	<b>Viscosity</b> [mPa*s]	Skinning time [min]	Shore hardness	Tensile shear strength +20 °C [N/mm²]	Breaking elongation %
COSMO® HD-120.110	8,000	50	50	3.5	500

No marking required and solvent-free	Emicode EC 1 <sup>PLUS</sup>	Food industry ISEGA	Sealing ETAG 022	Steering wheel IMO FTPC	Colours	Packages
✓					white	13.2 l bucket

# **COSMO® EP Epoxy Adhesives**

Adhesives for especially high strengths



## **COSMO® BIO-BASED**

#### The bio-based product range

They include a defined content of raw materials from renewable sources. Simultaneously, we



#### **Epoxy** adhesive

Our epoxy adhesive system consists of two components, a resin and a hardener system. It achieves especially high strength, very good heat-resistant bonding and provides an optimum when it is used for structural, high-strength bonded joints.

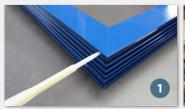
#### **Examples for application**

1	Aluminium window and door construction for bonding of corner joints

For bonding of natural and artificial stone

Fixation of struts for double floorings

	1	2	3
COSMO® EP-200.110	•	•	•







#### **Material suitability**



Epoxy adhesive	COSMO® EP-200.110
Film property	Tough-hard
Viscosity (+20 °C)	Medium viscous-pasty
Top live (+20 °C)	60 min
Tensile shear strength (+20 °C)	18 N/mm²
Shore hardness	85 D
Pressing time (+20 °C)	5 h
Colour	grey
Packages	2 x 310 ml tandem cartridge, 2 x 1,000 ml single PE-Euro cartridges

### Environmental (re)thinking instead of waiting

As a result, our bio-based adhesives and cleaners will actively contributeto the preservation of the environment. As innovative products they have been especially developed considering limited resources but without losing sight of our top quality which can be taken for granted.

**COSMO BIOBASED** 

characteristics. Less petrochemicals, more renewable

raw materials

could further optimise the product

#### **COSMO® PU-200.910** 2-C-PUR reaction adhesive

 ~ 67% bio-based carbon content

 Very low emission EMICODE EC1PLUS

Low flame-spread characteristics

Very good adhesion characteristics

DIN

8C269

Good weather-proofness

p.8 & 12

• ~ 45% bio-based carbon content

· Self-adhesive after curing

· High strength on a

**COSMO® DS-470.900** 

Adhesive sealant for vapour

wide variety of film types

· Very low emission EMICODE EC1PLUS

DIN 8C092

COSMO® PU-200.900 2-C-PUR reaction adhesive

• ~ 60% bio-based carbon content

• H351 (R40) No marking required

UV colourfast

p. 8



8C160



**COSMO® PU-220.900** 

2-C-PUR reaction adhesive

• ~ 60% bio-based carbon content

Very low-foaming

Good water resistance

• Adheres to a wide variety of substrates





# **COSMO® CA Superglues**

## The extremely fast setting adhesives



#### Superglues

The solvent-free, one-component superglues made by Weiss especially feature high universality and support you efficiently in all processes where especially fast and powerful bonding is important. The most difficult material connections which, in the past, could only be achieved by complex bonding processes with long pressing and rest times, can now be performed with our highly-modern CA-adhesives within seconds and are immediately ready for the next production process.

#### **Examples for application**

Model making



Metal construction





Plastics / rubber processing



Clocks, jewellery and prize

Furniture production



Leather and shoe industry

Window and door construction Advertising technique





Electrical and electronic industry Medical and dental technology



Toy industry





Adhesive system	Fixing time	Adhesive joint	<b>Viscosity</b> [mPa.s]	Heat resistance [°C]	Weather resistance
COSMO® CA-500.110	Short	Hard	20	125	High
COSMO® CA-500.120	Short	Hard	90	125	High
COSMO® CA-500.130	Long	Hard	900	90	High
COSMO® CA-500.140	Long	Hard	1,000	85	Good
COSMO® CA-500.150	Long	Hard	90	135	Good
COSMO® CA-500.160	Long	Elastic	70	75	Good
COSMO® CA-500.170	Long	Hard	280	85	High
COSMO® CA-500.200	Short	Hard	20	125	High
COSMO® CA-510.110	Long	Hard	1,200	80	High

## **Examples for application**

Adhesive system	1	2	3	4	5	6	7	8	9	10	11	12	
COSMO® CA-500.110		•	•	•		•	•	•	•	•	•	•	Super-fast
COSMO® CA-500.120	•	•	•	•	•	•	•	•	•	•	•	•	For universal use
COSMO® CA-500.130	•	•			•	•	•		•			•	Decoration specialist
COSMO® CA-500.140		•						•		•	•		Metal adhesive
COSMO® CA-500.150		•		•							•	•	Heat-resistant
COSMO® CA-500.160		•	•	•					•				The elastic adhesive
COSMO® CA-500.170	•			•	•		•		•	•			Our assembly professional
COSMO® CA-500.200													Plastics adhesive
COSMO® CA-510.110	•	•	•	•	•		•	•	•	•	•		Extremely non-slump

## **Material suitability**

Adhesive system	Alu- mini- um	Steel	ABS	PS	GFK	PVC	PMMA	HPL	Wood	MDF	Card- board	Leath- er	EPDM
COSMO® CA-500.110	•		•	•	•	•	•	•				•	•
COSMO® CA-500.120	•		•	•	•	•	•	•				•	•
COSMO® CA-500.130			•	•	•	•	•	•					
COSMO® CA-500.140	•	•			•			•					
COSMO® CA-500.150	•	•			•			•					
COSMO® CA-500.160													
COSMO® CA-500.170			•	•	•	•	•	•	•	•	•	•	
COSMO® CA-500.200	•		•	•	•	•	•	•				•	•
COSMO® CA-510.110			•	•	•	•		•	•	•	•	•	•

For absorbent substrates	Functional strength [seconds]	Curing time [hours]	Gap bridging [mm]	Packages
Limited suitability	4-8	16	max 0.1	20 g, 50 g and 500 g bottle
Limited suitability	4-15	16	max 0.1	20 g, 50 g and 500 g bottle
Limited suitability	15	16	max 0.1	20 g, 50 g and 500 g bottle
Limited suitability	20-100	16	max 0.1	20 g, 50 g and 500 g bottle
Limited suitability	4-15	16	max 0.1	20 g, 50 g and 500 g bottle
Limited suitability	15	16	max 0.1	20 g, 50 g and 500 g bottle
Well suited	20-360	16	max 0.15	20 g, 50 g and 500 g bottle
Limited suitability	5-9	16	max 0.1	20 g, 50 g and 500 g bottle
Well suited	15-240	16	max 0.1	20 g tube

# **COSMO® DS Dispersion Adhesives**

#### Adhesive sealants for building trade and industry





#### **Dispersion adhesives**

We are offering classic PVAc dispersion glues that meet the D2, D3- or D4 characteristics and certainly, also the requirements of WATT 91. We are also offering a choice of adhesive sealants that are mainly used in the field of "airtight bonding". Our products are continuously tested and monitored in accordance with the applicable DIN and EN standards.

#### **Examples for application - Gluing of wood**











- Gluing of joints in assembly parts, between boards as well as of surfaces of wood and fibrous elements
- Gluing of softwood, hardwood and exotic wood for cold, hot, as well as for high-frequency gluing
- Production of wood windows and doors for gluing of the corner connections
- Stairway construction
- Gluing of veneer

Adhesive system	1	2	3	4	5
COSMO® DS-400.110	•	•	•	•	
COSMO® DS-400.150	•	•			•

Material suitability







Adhesive system	Application	Basis	<b>Viscosity</b> [mPa.s]	Film property
COSMO® DS-400.110	Wood adhesive, EN204 - D3	PVAc dispersion	13,000	Tough-elastic
COSMO® DS-400.150	Wood adhesive, EN204 - D2	PVAc dispersion	13,000	Semi-hard
COSMO® DS-420.110	Adhesive sealant for assembly works as per DIN 4108-7/11, EnEV	Modified acrylate polymer dispersions	Medium viscous-pasty	Permanently elastic
COSMO® DS-420.240	Vapour barriers - adhesive seal- ant as per DIN 4108-7/11, EnEV	Modified acrylate polymer dispersions	Medium viscous-pasty	Permanently elas- tic, self-adhesive
COSMO® DS-450.110	Vapour barriers - adhesive seal- ant as per DIN 4108-7/11, EnEV	TPE	-	Permanently elas- tic, self-adhesive
COSMO® DS-470.900	Vapour barriers - adhesive seal- ant as per DIN 4108-7/11, EnEV	Modified dispersions	Medium viscous-pasty	Permanently elas- tic, self-adhesive

#### Examples for application - airtight and windtight bonding

- For permanently elastic, airtight bonding of joints, structural connections and overlaps, sealing of diffusion barriers, vapour-proof barriers and sealing films in dry construction (excluding swimming pools) in accordance with the energy saving regulation EnEV 2016
- Bonding of connecting and overlapping joints of moisture-diffusing underlays in the roof and façade area
- Bonding/sealing of diffusion-tight and moisture diffusing seal tapes with window and door assembly



#### Material suitability



Colour	Open time +20 °C [min]	Pressing time +20 °C [min]	Emicode EC 1 <sup>PLUS</sup>	<b>Bio-based</b> DIN-tested	Packages
opaque	12	22			13.2 l bucket, 150 l drum
opaque	12	15			31.5 l hobbock
white-green			<b>√</b>		310 ml cartridge, 600 ml sachet
light blue			<b>√</b>		310 ml cartridge, 600 ml sachet
transparent			<b>✓</b>		16 linear metres / adhesive on a roll
Pearl-white			✓	✓	310 ml cartridge, 600 ml sachet

# **COSMO® SL Dispersion Adhesives**

Bonding of parts of hard PVC and acryl (PMMA)





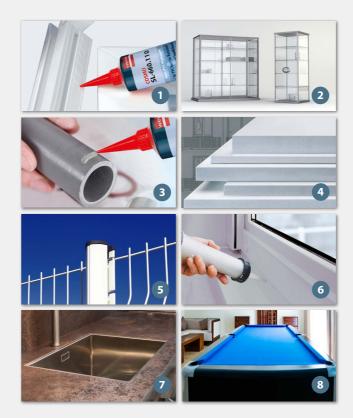
#### **Diffusion adhesives**

Our diffusion adhesives for bonding parts of hard PVC and acryl (PMMA) have proved to be successful for more than 40 years. In addition to the good resistance to weather and UV-radiation, these adhesives also feature their film resistance to aging.

#### **Examples for application**

- 1 Plastic window construction: Bonding of additional profiles, like sill drips, drain bars, blow bars and shutter bars Bonding of cover caps and shutter guides in PVC profiles
- Construction of display cabinets: constructive bonding of acrylic plates with each other
- Sanitary area: Bonding of tubes and rain gutters (no pressure pipes)
- Construction of trade fair and promotional signs: constructive bonding of integrated rigid foam slabs, e.g. Forex plates
- Made of PVC hard
- Bonding of cover/end caps on sections of hard PVC, e.g. fence poles
- Joint sealing up to 7 mm joint width, e.g. between window sill and window profile (not suitable for expansion joints e.g. as per DIN EN 15651, etc.)
- Construction of sinks and shop counters: Bonding of stainless steel sheets with chipboards and batten boards Bonding of rubber, felt, HPL (DKS), diverse plastics and metals on chipboards, hard fibre and laminated boards, as well as insulating materials (not suitable for polystyrene or other types of PS foam)

Adhesive system	Application	Basis	<b>Viscosity</b> [mPa.s]
COSMO® SL-650.120	ASSEMBLY	PMMA polymers in solvent	2,600
COSMO® SL-660.120	ASSEMBLY	Vinyl chloride polymers in solvent	4,000
COSMO® SL-660.130	ASSEMBLY	Vinyl chloride polymers in solvent	4,000
COSMO® SL-660.150	ASSEMBLY	Thermoplastic Polymers in solvent	Medium viscous-pasty
COSMO® SL-660.180	ASSEMBLY	Vinyl chloride polymers in solvent	2,500
COSMO® SL-660.190	ASSEMBLY	Vinyl chloride polymers in solvent	2,500
COSMO® SL-660.210	ASSEMBLY	Vinyl chloride polymers in solvent	4,000
COSMO® SL-660.220	ASSEMBLY	Vinyl chloride polymers in solvent	4,000
COSMO® SL-670.110	Surface	Polychloroprene in solvent	2,000



Adhesive system	1	2	3	4	5	6	7	8
COSMO® SL-650.120		•						
COSMO® SL-660.110	•		•	•				
COSMO® SL-660.120	•		•	•				
COSMO® SL-660.130	•		•	•				
COSMO® SL-660.150	•		•	•	•	•		
COSMO® SL-660.180	•		•	•				
COSMO® SL-660.190	•		•	•				
COSMO® SL-660.210	•		•	•				
COSMO® SL-660.220	•		•	•				
COSMO® SL-670.110							•	•

#### **Material suitability**

	Film property	Colour	Open time	Packages	Alu- mini- um	Stainless steel	PVC hard	Acryl	Wood	EPDM
	Tough-hard	colourless	40	180 g tube				•		
	Tough-hard	white	60	200 g tube			•	•		
	Tough-hard	colourless	60	200 g tube			•	•		
	Elastic	white	45-60	310 ml cartridge			•	•	•	
	Tough-hard	colourless	60	10 kg bucket			•	•		
_	Tough-hard	colourless	120	180 g tube			•	•		
	Semi-hard	colourless	60	200 g tube			•	•		
	Semi-hard	white	60	200 g tube			•	•		
	Tough-elastic	amber	-	12 kg bucket	•	•	•	•	•	•

# **COSMO® CL Cleaning Agent**

**Professional cleaning** 





#### **Cleaners & Activators**

Our solvent-based cleaning agents are available with different concentrations for different levels of pollution and cleaning tasks. Furthermore, we are offering a choice of cleaning agents based on surfactants as well as activators for activation of the adhesive surfaces.

# Cleaning, Polishing, Smoothing & Activating of diverse surfaces before and after bonding

Non-solvating cleaning

Removal of fresh adhesive residues, dust, grease pencil, rubber residues, fresh PUR foam, as well as tar and bitumen spots, preparation of bonding **Solvating** cleaning Preparation of bonding, removing of markings and coarse dirt



Application	Solvating	PVC plastics	Plastics General	Film-laminated surfaces	Powder-coated & anodised surfaces	Metals	Mineral substrates		
CLEANING	Not	CL-300.140 SPECIAL CL-300.150 CL-300.1		CL-300.150	CL-300.150	CL-300.120	CL-310.110 CL-310.120		
Smoothing /	Strong	CL-300.	.110						
polishing	Slight	CL-300.	.120						
Activating	Not	CL-310.110							

Cleaner system	Cleaner type	Plastics
COSMO® CL-300.110	PVC cleaning agent	Solvating
COSMO® CL-300.120	PVC cleaning agent	Solvating
COSMO® CL-300.140 SPECIAL	Plastics cleaner	Non-solvating
COSMO® CL-300.150	Special cleaner	Non-solvating
COSMO® CL-300.200	Industrial cleaning agent	Non-solvating
COSMO® CL-300.220	Tool cleaners	Non-solvating
COSMO® CL-310.110	Activator	Non-solvating
COSMO® CL-300.220	Tool cleaners	Non-solvating
COSMO® CL-350.110	Cleaning milk	Non-solvating
COSMO® CL-360.110	Special cleaner	Non-solvating

#### **Cleaning & Caring**











- 1 Cleaning of tools and adhesive applicators from not cured PUR and epoxy reaction adhesives
- 2 PVC hard white and aluminium-anodized surfaces, as well as for cleaning other smooth, mainly plastics-based surfaces
- Cleaning of surfaces in the field of wood, plastics and aluminium window, door and façade construction
- 4 Regular care of already assembled window, door and shutter profiles
- 5 Streak-free cleaning of glass and high gloss surfaces

	1	2	3	4	5
COSMO® CL-300.220	•				
COSMO® CL-350.110		•		•	
COSMO® CL-360.110			•	•	•

#### Cleaning & care of windows and doors

**COSMO® CL-Service Set** 

Practical sets for cleaning, care, protection and maintenance of windows and door profiles, roller shutters, sealings and mechanic systems.

#### Contents of service set for white profiles and decorative profiles

- Cleaning milk (CL-350.110) or special colour cleaning agent (CL-360.110)
- Sealing care
- Fitting oil
- Cleaning rag

Particularity	Packages
Fast drying	1,000 ml bottle, 10 l canister
No impairment on weather resistance of cleaned PVC profiles	1,000 ml bottle, 10 l canister
Antistatic effect	1,000 ml bottle, 10 l & 30 l canister
Mild odour during processing	1,000 ml bottle, 10 l canister
Strongly degreasing effect	1,000 ml bottle
Also solvates partially cured/cured adhesives	10 l canister
It cleans and activates the bonding surface	250 ml bottle, 1,000 ml bottle
Also solvates partially cured/cured adhesives	200 l drum
Intensive cleaning effect, gentle to surface, pH neutral	200 ml bottle, 500 ml bottle
Intensive cleaning effect, gentle to surface, pH neutral	200 ml bottle, 500 ml bottle



# **Special Products & Processing Equipment**

#### Bonding technique from one source

# Synergy Linked solutions with **COSMO®** adhesives and composite panels

#### Special products

COSMO® SP-830.180

Primer / first coat

For adhesion promotion and improvement on various absorbent and mineral substrates.

Packages: 1,000 g bottle



COSMO® SP-620 Paste paints

Staining of adhesive reaction systems

Colours: blue, yellow, white, red, black

Packages: 50 ml bottle



Repair of cracks, wrong bores and other damages on white PVC-hard sections. Fast, easy to use, safe and impact-tough.

Packages: 13 g can & 6 g glass bottle



COSMO® SP-840.110

Adhesion promotion for bonding of TPEand silicone seals with COSMO® CA-adhesives. Replaces very expensive pre-treat-



For reshaping and bending of thermoplastic plastics profiles. Odourless and

Packages: 35 kg hobbock, 250 kg drum



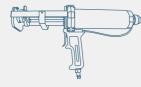
CA accelerator

Packages: 200 ml tube, 5 l canister

for 2 x 190 ml tandem cartridges

for 2 x 310 ml tandem cartridges





COSMO® SP-810.120

Manual pressure gun

COSMO® SP-760.141

COSMO® SP-760.151

**Eco-humidifier** 

For optimum and economic dosing of COSMO®-CL solvent-based cleaning

Safety container with GS-sign.

5l safety container

COSMO® SP-810.110 **CA** capillaries

For the exact dosing of CA-adhesives. Matches to CA drip tip and CA cap.



Primer / first coat

ment procedures.

Packages: 50 ml brush bottle



**Bending fluid** 

biodegradable.



For accelerated and controlled curing of COSMO® CA adhesives



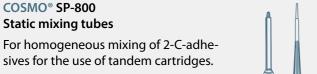
#### **Processing equipment**

#### **Pressure guns**

COSMO® SP-750.111 for 2 x 190 ml tandem cartridges

COSMO® SP-750.121

for 2 x 310 ml tandem cartridges



#### COSMO® SP-810

#### Flat nozzle

For easy processing of thixotropic and flowable adhesives.

Application width adjustable for 20-75 mm.



**Examples of application** 

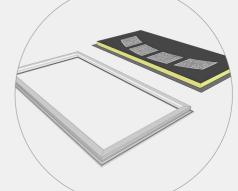
By combining our COSMO® adhesives with our COSMO® composite panels and façade elements we are able to provide reliable solutions for you in the fields of construction, automotive manufacturing, RVE (frame widening elements), ship and yacht building, and much more from one source.

This advance of competence offers important advantages for you referring your individual project. Already during the planning phase, we can react to your specific wishes and requirements.

#### Your advantages at a glance:

- A fine-tuned system used from the beginning
- Advice and planning from one source
- Tested materials
- High safety with certified systems
- Innovative ideas and approaches possible
- Problem solutions can be implemented fast

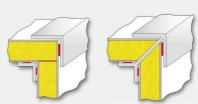




Benefit from a system that has been tuned perfectly and adapted to your application!



#### For the automotive manufacturing:



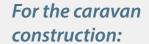
- 1 The controlled 2-C-STP Construction Adhesive COSMO® HD-200.101 for bonding and sealing applications in automotive manufacturing and vehicle body manufacture.
- 2 COSMO® Tech GFK composite panels for the construction of ceiling elements, side walls and floor plates.

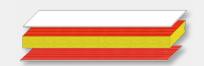
#### For leaf-enclosing entrance doors:





- 1 The controlled 2-C-STP construction adhesive COSMO® HD-200.101 for joining of top coat and section frame.
- 2 Filling components (top coats and core materials) for unlimited functional and design possibilities.





- Process optimised 1-C-PUR surface adhesives COSMO® PU-160.540 and COSMO® **PU-160.530** for bonding and the production of side walls of caravans.
- COSMO® Tech GFK composite panels for the construction of ceiling elements, side walls and floor plates.



# **Application engineering**

More than 200 years of experience



#### Always up to date

We are happy to bring our products and fields of application closer to you at the www.weiss-chemie.de and to keep you informed about the latest developments.



#### **Current issues**



By our slide show and our News column you are alwavs informed on current topics and remain up to date.

#### **Fields of Application**



The reorganisation of our Fields of Application enables you to intentionally look for application solutions and conveniently to navigate to your search target.

+ PUDOL stands for convincing quality of special products in the field of commercial cleaning. In ad-

dition to a complete range of cleaning and care products for different applications, we are offering a comprehensive service with interesting solutions and benefits. Visit our website: www.pudol.de

#### Service / Downloads



1 In our Product / Application area, you will directly find the appropriate contact person. In addition, you can easily download all print media as well as data sheets.

#### **Trade fairs**



Usit us at our booths at the national and international trade fairs and obtain information online about all details and facts referring our participations in trade fairs.



#### **Customer support**

Flexibility and the creation of customer-oriented problem solutions count among the elementary objectives of our company. Therefore, it is very important to us to provide professional and innovative solutions with convincing advantages for production methods and with high efficiency in close cooperation with our customers.

A highly motivated team of application engineers, materials testers and chemists with long-term experience in development, modification, materials science, building physics and application of adhesives and composite panels is on hand with help and advice for you.



#### **Application engineering Adhesives**

Support with creating

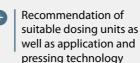
the requirements speci-



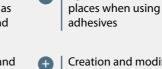
Expert advice on the selection of adhesives



fication



Training for workers and specialist dealers; technical lectures



Creation and modification of adhesives in our Research and Development department

Rationalisation pro-

posals for work flows

Optimisation of work-



#### Test possibilities in our application technology and internal research and development department

H With our own test facilities we are not only able to test in compliance with DIN and EN standards but we can also evaluate your components (component sizes) under operating conditions in a practice-oriented way. In addition, we ensure the high quality of our products on the basis our cooperation with the most diverse testing institutes.



**Application engineering Composite panels** 



Individual element structure

Application-specific material components

Project-related proposals for solutions

Selection of materials in accordance with construction-physical requirements and conditions

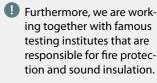


#### **Test possibilities in our Technical Centre**



#### **Materials tests:**

- Storage at alternating climate
- · 3-point bending rigidity • Perpendicular tensile strength
- Colour measurement
- Storage in water
- · Determination of U-values

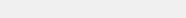




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Weiss Chemie + Technik GmbH & Co. KG.





Cleanliness refreshes your senses

**PUDOL** – Cleaning and care agent

# An overview of our range of products

#### Experience quality on a completely new level, with the powerful products by Weiss:



#### **COSMO®** Adhesives

Durably firm joints

**COSMO® CA** (Cyanoacrylates)

**COSMO® PU** (Polyurethane adhesives)

**COSMO® CL** (Cleaning agents)

**COSMO® SL** (Dispersion adhesives)

**COSMO® HD** (Hybrid adhesives)

**COSMO® EP** (Epoxy-resin adhesives)

**COSMO® DS** (Dispersion adhesives)

**COSMO® SP** (Service products)

#### Fields of application

- Windows and doors
- Transportation / Marine engineering
- Industry
- Assembly
- Dry construction
- Airtight bonding
- Wood / Furniture industry
- Container construction
- Composite panels
- Fire protection
- Advertising industry

#### Do you have any questions?

**Our Service Center Business area Adhesives:** 

+49 (0) 2773 / 815 - 255

+49 (0) 2773 / 815 - 274



#### **COSMO®** Composite panels

Unlimited possibilities for design

**COSMO® Therm** (heat-insulating)

**COSMO® Silent** (sound insulating)

**COSMO® Protect** (penetration resistant)

**COSMO® Design** (grooved)

**COSMO® Tech** (individual)

**COSMO® Frame** (frame widening)

#### Fields of application

- Window and façade
- Door construction
- Industry
- Automotive manufacturing
- Trailer construction
- Partition panel construction
- Gate construction
- Container construction
- **Energy conservation**
- Fire protection
- Burglar resistance
- Sound proofing

#### Do you have any questions?

**Our Service Center Business Area Composite panels:** 

+49 (0) 2773 / 815 - 321

**Our Service Center** Business area Façade:

+49 (0) 5245 / 9241 - 21

#### **PUDOL** Cleaning and care products

Cleanliness refreshes your senses

#### **PUDOL SOFT**

Mild cleaning agent for sensitive materials

#### **PUDOL CARE**

Maintenance product for high gloss and hygiene

#### **PUDOL POWER**

Powerful cleaning agent for extreme pollution

#### **PUDOL FRESH**

Cleaning agent for cleanliness and fresh air

#### Fields of application

- Flooring
- Sanitary installations
- Clothing care
- Foodstuff industry
- Household and gastronomy
- Windows and glass
- Dishwasher
- Carpet and upholstery
- Industry and workshop
- Cars
- Skin cleaning
- Skin protection

#### Do you have any questions?

**Our Service Center PUDOL:** 

+49 (0) 2743 / 9212 - 0



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