COSMO® Adhesives

Bonding & cleaning in window and door construction



Together toward success

A strong partner



Solutions for windows and doors

Our comprehensive range for production and assembly

Plastic

Window

construction

p. 08 - 09

Bonding, sealing

& cleaning

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, Aluminium **COSMO**[®] about 325 employees at four sites participate in the success of our group. Window **BIO-BASED** construction p. 04 - 05 p. 06 - 07 1815 **Bio-based** Bonding, sealing & adhesive & cleaning agent cleaning Company **Company history** Aluminium windows, doors, By pooling the core competences of our business segments of Since the company's foundation in 1815, Weiss has developed folding shutters & insect screens adhesives and sandwich panels under a single roof, we are able to from a small hide-glue producer to an internationally acting, in-Protection of offer solutions from one source to our customers that are efficient dustrial company for modern adhesive systems and composite Cut edges of sections p.07 and of high technical quality. panels. With a passion for quality and the aspiration to meet our customers' high expectations, we are a recognised and reliable We are among the leading manufacturers in these two business partner on the market. segments in Europe and moreover, we also increasingly sell our Aluminium windows, doors, products outside of Europe, such as in China, Russia and the USA. folding shutters & insect screens Corner angle bonding p.06 Powerful product range *Plastic / aluminium windows* RAL assembly / Connecting bonding S.11 **Business area Business area** PUDOL **Adhesives Composite panels Cleaning and care agent** Adhesives Processing accessories p.13 **Durably firm joints** Unlimited possibilities for design **Cleanliness refreshes your** senses Certifications Our range of products includes more than Traditional joining technologies like 5,000 variants of composite panels. Be-PUDOL stands for convincing qualriveting, soldering, welding, or screwing, cause there is a large number of top coats ity of special products in the field of will increasingly be replaced by modern and core materials available as well as Low-emission adhesives from Weiss / www.emicode.de commercial cleaning. In addition to a adhesive systems, resulting in many the possibility of combining and processcomplete range of cleaning and care advantages. ing them in many different ways, a vast GEV-EMICODE[®]-licensed products products for different applications, we number of creative designs results for the are offering a comprehensive service Our product range includes more than finished element. with interesting solutions and benefits. 400 variants of surface and construction adhesive and superglues, as well as products. A subsidiary special adhesives for a wide variety of of the Weiss Group applications.

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.

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



Sustainable and environmentally friendly products

The results of successful research and development

Bio-based adhesive & cleaning agent

We always have our environment in mind



Environmental "Thinking" instead of waiting

The world's population is increasing - but our fossil resources are decreasing. So, more than ever before, it is essential to think of a sustainable future! Exactly for these reasons, sustainability, particularly regarding environmental protection, is of particular importance. It is therefore also an important subject for Weiss, not only for today, but also for future generations.

Responsible management of our water protection, exhaust gasses, and waste cyclesalready form part of our firmly established standards. And now, to further optimize our utilization of resources, we are concentrating on replacing fossil fuels in our adhesives with renewable resources.

Ecological sustainability - bio-based adhesives

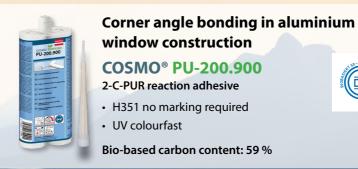
Our bio-based adhesives actively contribute to the protection of the environment: As innovative products, they have been developed with particular regard to our limited resources, without losing sight of the top quality that we take for granted.

To a large extent, many of these raw materials produced by agricultural and silvi-

cultural processesare climate-neutral. This way, no increase of CO, emissions will be generated in the future. Environmental and limited resources will be protected for further generations. In the meantime, there are numerous possibilities for processing the most diverse bio-based materials such as starch, vegetable oil, resins, lignins, proteins, and others. It is also possible to use renewable raw materials in adhesives. By substituting fossil resources, we have succeeded in developing adhesives on the basis of bio-based products.

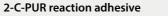
Optimization of our adhesives

Our bio-based adhesives include a high content of raw material from renewable sources. Simultaneously we are further improving their already very good properties. Sustainable quality....made by Weiss!



Surface bonding on doors

COSMO® PU-220.900



- Good adhesive properties to different surface materials
- Flame resistant after curing

Bio-based carbon content: 60 %

Bonding of window joint tapes / RAL assembly

COSMO® DS-470.900

- 1-C dispersion adhesive
- Good application at low temperatures
- Fast curing
- Bio-based carbon content: 47 %



Optimierte Klebstoffeigenschaften Optimized

COSMO BIOBASED



Corner angle bonding

Aluminium windows, doors, folding shutters & insect screens

Corner angle bonding, sealing & cleaning

Aluminium windows, doors, folding shutters & insect screens



Injection method

For profile systems where the adhesive is injected into the profile through a specially positioned borehole.

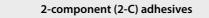
Classic method

Before joining the profiles, the corner angle adhesive is inserted in the profile chambers directly from the cartridge or applied by a spatula.





1-component (1-C) adhesives





1-C adhesive	Adhesive base	Shore hardness	Film hardness	Skinning time [min]	Viscosity	Particularities
COSMO® PU-180.120	Polyurethane	75D	Tough-elastic	18	Low viscous	Long skinning time
COSMO [®] PU-100.130	Polyurethane	60D	Tough-elastic	7	Medium viscous	Metal pro
COSMO [®] HD-100.110	STP hybrid	72A	Elastic	9	Low viscous	Free from H351 UV colour-fast
COSMO® HD-100.450	STP hybrid	60A	Elastic	6	Medium viscous	Free from H351 UV colour-fast

2-C adhesive	Adhesive base	Shore hardness	Film hardness	Skinning time [min]	Viscosity	Particularities
COSMO [®] PU-200.280	Polyurethane	85D	Tough-hard	60	Low viscous	High-strength
COSMO® PU-200.310	Polyurethane	85D	Tough-hard	20	Low viscous	Fast response time
COSMO® PU-200.334	Polyurethane	65D	Semi-hard	50	Low viscous	Semi-hard adhesive joint
COSMO® PU-200.350	Polyurethane	80D	Tough-hard	30	Low viscous	Free from H351 UV colour-fast
COSMO [®] PU-200.500	Polyurethane	72D	Tough-hard	23	Low viscous	High-strength Free from H351 without training
COSMO® EP-200.110	Epoxy resin	85D	Tough-hard	60	Medium viscous	Free from H351
COSMO® HD-200.101	STP hybrid	63A	Elastic	30	Low viscous	Free from H351 UV colour-fast
COSMO® HD-200.201	MS hybrid	48A	Elastic	40	Low viscous	Free from H351 UV colour-fast
COSMO® PU-200.900	Polyurethane	80D	Tough-hard	25	Low viscous	approx. 60 % bio-based

Sealing of cut edges of sections

To prevent bare aluminium cut edgesfrom corroding, they must be effectively protected against air and moisture.



Corrosion sealant

COSMO® HD-100.411

Colour: grey (also available in white and black)

2-C-MS-Adhesive & Corrosion sealant

COSMO® HD-200.101 **COSMO® HD-200.201**

Colour: grey



Bonding of corner angles in aluminium facing formworks

In order to refine the windows, aluminium facing formworks are placed onexisting windows. The individual aluminium profile formworks are joined to a frame at the mitred corners with corner connectors made of die cast aluminium and bonded forced-locked.

1-C MS adhesive COSMO® HD-100.400

Very low-emission 1-C- hybrid reaction adhesive

Special Properties

- High strength
- Elastic adhesive joint
- UV colourfast

Colour: white, also available in grey and black

2-C STP adhesive COSMO® HD-200.101

Fast and controlled curing 2-C-Hybrid reaction adhesive

Special Properties

- Elastic adhesive joint
- UV colourfast
- Also applicable as corrosion sealant
- Colour: grey





Cleaning

Cleaning of aluminium and powder coated as well as anodised surfaces.



Aluminium cleaning agent

Non-etching **COSMO® CL-300.150**

Removes fresh adhesive resi-

dues, dust, grease pencil, rubber residues and fresh PU foam.









Container variants 195 ml 2 : 1 uTAH cartridge 400 ml 2 : 1 tandem cartridge

Bonding & sealing Plastic windows & doors



Bonding of additional profiles

Bonding of additional sections, such as sill drips, drain bars, cleats and roller shutter bars, as well as cover caps and roller shutter guides in PVC profiles.





	Solvating cleaner					
Cleaning agent	COSMO® CL-300.110	COSMO [®] CL-300.120	COSMO® CL-300.900			
Designation	PVC smoothing agent	PVC cleaning agent	PVC cleaning agent			
Application	For the removal of scratches in PVC hard-white surfaces	 For PVC hard-white Cleaning of diverse non-transparent plastic materials 	Intensive cleaning of plastics			
Special Properties	Strongly dissolving	Slightly dissolving	• approx. 80 % bio-based • Slightly dissolving			



	Non-solvating cleaning agents					
Cleaning agent	COSMO® CL-300.140 SPECIAL	COSMO [®] CL-300.150				
Designation	Plastics cleaner	Special cleaner				
Application	For plastic materials (e.g. PVC, PMMA, PC, SAN and film-laminated profiles)	 PVC hard white and film-laminated profiles Removing fresh adhesive residues, dust, grease pencil, rubber residues, spots of tar and bitumen 				
Special Properties	With antistatic agent	Without antistatic agent For preparation of bonding				

PVC adhesives	Basis	Open time [s]	Viscosity [mPa.s]	Colour	Temperature and UV-resistance	Adhesive joint	
COSMO® SL-660.120	Containing THF	60	4000	white	Good	Tough-hard	
COSMO [®] SL-660.130	Containing THF	60	4000	colourless	Good	Tough-hard	
COSMO [®] SL-660.210	Reduced THF	60	4000	colourless	Good	Semi-hard	
COSMO [®] SL-660.220	Reduced THF	60	4000	white	Good	Semi-hard	
COSMO [®] SL-660.190	Free from THF (H351 no marking required)	120	2500	colourless	Good	Tough-hard	
COSMO [®] SL-660.250	Free from THF (H351 no marking required)	120	2500	white	Good	Tough-hard	





Bonding of film-laminated profiles

Joint bridging bonding and sealing

Assembly adhesive COSMO® SL-660.150

Bonding and sealing of additional profiles.

• Gap filling for joint width up to 7mm

Bonding of end strips on film-laminated profiles as well as roller shutter guides and end caps.

Fast-setting adhesive COSMO® CA-500.130

Special Properties

Special Properties

• High initial adhesion • UV- and weather-proof

- Solvent-free
- Very high strengths
- UV- and weather-proof
- Re-closable dosing cap





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2	





Bonding Wooden windows & doors

Bonding of EPDM seals & connection bonding

General tasks concerning windows & doors

Bonding of dressed timbers of windows and mortise tenon joints

Bonding of different soft, hard and exotic wood types







Adhesives	Basis	Bonding	Open time +20 °C [min]	Pressing time +20 °C [min]	Adhesive joint	Colour	Application
COSMO® PU-160.110	Polyurethane	D4 *	35	90	Tough-hard	brown	Dressed timbers
COSMO® PU-170.110	Polyurethane	D4 *	40	90	Tough-elastic	opaque	Dressed timbers
COSMO® PU-100.110	Polyurethane	D4 *	5	15	Tough-elastic	beige	Mortise tenon
COSMO® PU-100.250	Polyurethane	D4 *	3	10	Tough-hard	beige	Mortise tenon
COSMO [®] PU-180.150	Polyurethane	D4 *	10	30	Semi-hard	opaque	Mortise tenon
COSMO® PU-190.110	Polyurethane	D4 *	7	20	Semi-hard	opaque	Mortise tenon

* D3-/D4 dispersion adhesives as per DIN EN 204 and test method WATT 91



Bonding of EPDM seals

Window, façade and door elements are mainly equipped with profile seals made of EPDM. The corners and joints of EPDM window seals are bonded with many systems. An immediate bonding is desired here.

CA fast-setting adhesive COSMO® CA-500.110

Very fast curing adhesive for the EPDM adhesives in window construction.

Special Properties

- Short fixing times
- Long storage stability
- Re-closable dosing cap

Adhesive sealant COSMO® HD-100.410

Particularly suitable if an elastic bonding joint is required for EPDM joints.

Special Properties

- Elastic adhesive joint
- Joint-filling



RAL assembly / connection bonding

Adhesive sealant for assembly works COSMO® HD-100.510 **1-C-STP reaction mass**

assembly.

With outstanding adhesive properties on the different types of building materials & joint tapes.

Special Property

• Permanently elastic after curing

Adhesive sealant for assembly works COSMO® DS-470.900

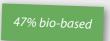
1-C dispersion mass

Special Properties

- Contains 47 % bio-based carbon content
- EMICODE class EC1^{PLUS}

Bonding of joint tapes on window and door jambs

Bonding and sealing of fleece-laminated joint filler tapes for window and door









Pre-treatment, bonding or frames & repair

General tasks concerning windows & doors

Accessories & care

General tasks concerning windows & doors



Pre-treatment for self-adhesive joint tapes

Adhesion promotion for self-adhesive joint tapes on different types of absorbent mineral substrates such as, cement and gypsum fibre board, concrete, stone, brick and lime sand brick masonry.

1-C dispersion primer COSMO[®] SP-830.180

Special Property

Permanently tacky after curing





Bonding of wing-concealing front doors on frame profiles

The optimum adhesive and the precise method depend on the door system, the design requirements as well as the materials to be bonded.

For these applications, Weiss is offering the 2C-STP construction adhesives COSMO® HD-200.101 and COSMO® HD-200.121 as product solution with system primer COSMO® CL-310.110.

- Fast and controlled full hardening
- Compensates the expansion of different materials
- Good weather resistance outdoors



Window repair

Repair of cracks, wrong bores and other damage.

PVC repair agent COSMO® SP-710.110

Special Properties

- Easy, safe and fast handling for the processing
- Hard, impact resistant adhesive joint





Profile forming

Reshaping and bending of thermoplastic plastic profiles

Bending fluid COSMO[®] SP-780.110

Special Properties

- Odourless
- Biologically degradable



Compressed air & manual pressure guns COSMO® SP-750 & SP-760

For dosing of COSMO®-tandem cartridges e.g.:

Static mixing tubes

COSMO® SP-800

Static mixing tubes for homogeneous mixing of 2-C adhesives for the use of tandem cartridges.

- · Homogeneous mixing achieves a constant adhesive quality
- · Easy handling of tandem cartridges with static mixer

Cleaning & care of windows & doors COSMO[®] CL Service Set

Practical sets for cleaning, care, protection and maintenance of windows and doors, roller shutters, sealings and mechanical systems.

Set contents for white profiles and decorative profiles

- Cleaning milk with abrasive contents for white profiles or special colour cleaning agent for decorative profiles
- Sealing care
- · Fitting oil
- Cleaning rag

Window clean

Eminently suitable for the care of all highgloss finished surfaces like window glass, mirrors, chromium, etc.

Properties

- Striation-free cleaning
- Dries forming a transparent layer

Multi Cloth

Universally applicable cleaning towels for the industry.

Properties

Strongly wear-resistant, absolutely lint-free cloth made of fleece with cleaning substances in a closable dispensing bucket.













Also available as private labels!

PUDOL **Special cleaner** for fly screens & mosquito nets

Removes pollen dust, fly speck and house dust from fly screens, mosquito nets and pollen protection grating made of nylon or metal.

Properties

- Highly effective
- Low foaming
- CLP conform and no marking required
- In a practical set: Spray bottle and cloth

PUDOL belongs to the Weiss company group and stands for convincing quality of special products in the field of commercial cleaning. Please find further information on Pudol on page 15.



Our service and advisory performances

Weiss, your competent and strong partner

Pudol – Cleaning and care agent

Cleanliness refreshes your senses

We strongly support you!

Weiss is representing top performance in the areas of adhesive and sandwich element technology.

For many decades, Weiss has been very successful in setting new market standards in terms of quality and excellent service. With our comprehensive product line of adhesives and sandwich panels, we are covering a wide variety of different applications.

Expert advice and service are counted to the elementary core competencies of our company. For all technical questions referring the application of our products the competent consultants of our Service Center will be available for you with their specialist knowledge.



Our service and advisory performances



Support with creating the requirements specification



Recommendation of suitable application devices as well as application and pressing technology



Expert advice on product selection



Optimisation of workstations with processing of adhesives and sandwich elements



Optimisation tips for the design of the bonding surfaces



Expert advice on all questions referring dangerous substances and goods.



work flows



Creation and modification of adhesives and composite panels in our Research and Development department.

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.



Our products and application fields



Product groups

- PUDOL SOFT for sensible materials
- PUDOL CARE for high-gloss hygiene PUDOL POWER
- for extreme soiling PUDOL FRESH for cleanliness and fresh air

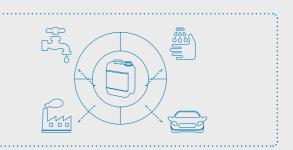
Cleaning program

- Universal / multi-purpose cleaning agent
- Industrial cleaning agent
- Carpet cleaning agent • Fresh cleaning agent
- Special cleaner
- Disinfection cleaning agent
- Floor cleaning agent
- Basic cleaning agent
- Wipe cleaning products Main care products

Pudol Chemie GmbH & Co. KG / Bahnhofstr. 2 / D-57520 Niederdreisbach







Fields of application

- Universal
- Flooring
- Sanitary installations
- Clothing care
- Foodstuff industry
- Household and gastronomy
- Special

- Windows & glass
- Dishwasher
- Carpet & upholstery
- Industry & workshop
- Skin cleaning & protection
- Cars



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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
- Sandwich elements
- Fire protection
- 🖶 Advertising industry



COSMO® Sandwich elements 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

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



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