

COSMO® Adhesives and Sealants

Transportation & Marine





CONSTRUCTIVE AND
SURFACE BONDING

SECURE AND DURABLE CONNECTIONS

Traditional bonding technologies like riveting, soldering, welding, or screwing are increasingly being replaced by modern adhesive systems, resulting in numerous advantages.

For example, adhesives do not change the specific properties of the respective parts to be joined, as is the case with welding. In addition, no holes that risk weakening the structure of the materials are required, for example, when screwing or riveting.

Glued joints also ensure a more even force distribution across the entire bonded surface, resulting in significantly higher overall strength. Weiss offers highly loadable adhesive systems for a wide variety of mobile applications, tailored to the special requirements of this market segment. Ensure the required high quality of your products with our adhesives and achieve strengths that guarantee a secure and durable connection of your joined parts, even under extreme loads.

OUR EXPERTISE FOR YOUR BONDING PROCESSES

- + Expert advice on the selection of adhesives
- + Suggestions for optimisation and rationalisation of your work flows
- + Training courses on adhesive handling and processing equipment technology



- 1 Refrigerated vehicles
- 2 Caravan construction
- 3 Ambulance vehicles
- 4 Delivery and mail transporters
- 5 Food and beverage trolleys
- 6 Fire engines

- 7 Rail vehicle construction
- 8 Ships & cabin construction
- 9 Bus manufacturing
- 10 Construction machinery
- 11 Tanker lorry
- 12 Cash-in-transit vehicles



CERTIFIED ADHESIVES IN THE SHIPPING INDUSTRY

In shipping, "all commercially used ships, yachts and boats" are only allowed to use tested and approved products. Weiss' quality management system complies with Module D (Production Quality Assurance) of Directive 2014/90/EU on marine equipment. Approved adhesive systems are subject to this system.

These special requirements of shipbuilding are demonstrably met by the adhesives marked with the steering wheel.





Surface bonding places specific demands on the adhesive system, depending on the technique used to apply the adhesive and choice of material. In order to support your individual process, we offer a variety of adhesive systems with different settings for viscosity, thixotropy, processing and pressing times.

Top features of 1-C-PUR

- + joint-filling
- + no additional costs for mixing
- + less adhesive application
- + low investment machine order

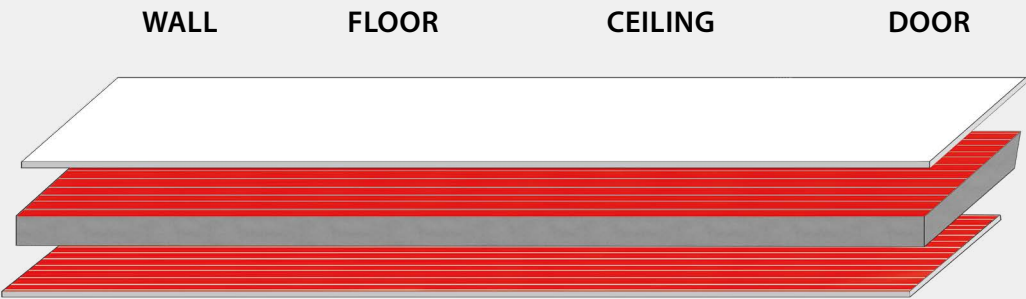
Top features of 2-C-PUR

- + highly flexible adjustable process time
- + low foaming
- + low pressing pressure required
- + defined adhesive joint possible

1-C-PUR ADHESIVES

	The slow one	The low foamer	The plastic professional
Product	COSMO® PU-160.440	COSMO® PU-160.690	COSMO® PU-160.530
Special property	<ul style="list-style-type: none">Long open timeAdheres to a wide variety of substratesgood adhesive strength in hot conditions	<ul style="list-style-type: none">low foaming compared to other 1-C-PUR adhesives of the COSMO® PU seriesexcellent penetration properties	<ul style="list-style-type: none">excellent adhesion to various plasticsvery broad range of adhesion without primer
Viscosity (+25°C)	approx. 4 000 mPa.s	approx. 3 800 mPa.s	approx. 6 500 mPa.s
Skin formation time/pot life	approx. 75 min	approx. 18 min	approx. 40 min
Pressing time	approx. 220 min	approx. 45 min	approx. 240 min
Tensile shear stress, +20°C	approx. 5 N/mm²	approx. 7.9 N/mm²	approx. 6 N/mm²
Solvent-free	✓	✓	✓
Can be coated over	✓		✓
Steering wheel/fire retardant	-	-	-
Foaming	✓	(✓) low	✓
Density	approx. 1.10 g/cm3	approx. 1.10 g/cm3	approx. 1.12 g/cm3

EXAMPLES FOR APPLICATION



2-C-PUR ADHESIVES

The slow one	The strong grip	The fast one
COSMO® PU-220.150	COSMO® PU-220.590	COSMO® PU-220.550
<ul style="list-style-type: none">Long open timeAdheres to a wide variety of substratesGood bonding strength at heat	<ul style="list-style-type: none">Specialist in aluminium honeycombsTensile shear strength approx. 15 N/mm2light, structurally viscous	<ul style="list-style-type: none">fast curing timeAdheres to a wide variety of substratesGood bonding strength at heat
approx. 3 000 mPa.s	approx. 5 000 mPa.s	approx. 3 000 mPa.s
approx. 100 min	approx. 27 min	approx. 12 min
approx. 5 h	approx. 110 min	approx. 60 min
approx. 16.0 N/mm²	approx. 16.0 N/mm²	approx. 18.0 N/mm²
✓	✓	✓
✓	✓	✓
-	-	-
-	-	-
approx. 1.48 g/cm3	approx. 1.49 g/cm3	approx. 1.48 g/cm3

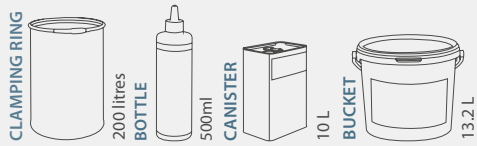
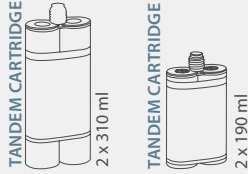


Our one and two-component adhesive systems are suitable for structural bonding of a wide variety of materials. Even under extreme loads, they offer a safe and durable connection, both in the trade and in industry.

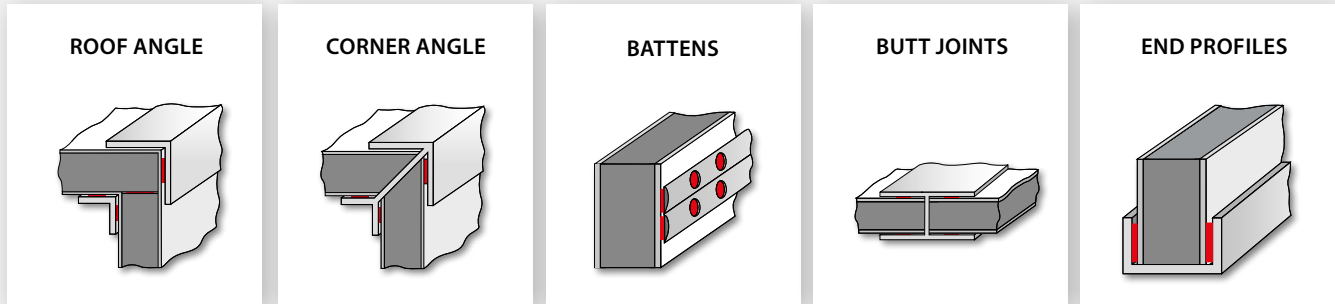
TOP properties

- + high tensile and shear strength
- + long-term resistance to environmental influences
- + good adhesion to different materials
- + good resistance to dynamic loads

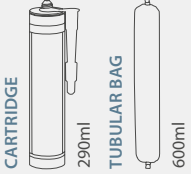
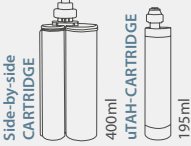
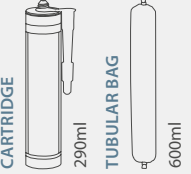
2-C-PUR ADHESIVES

		
	The slow one	The one free from H-351
Product	COSMO® PU-200.180	COSMO® PU-200.500
Special property	<ul style="list-style-type: none">• many certificates such as GEV EC 1, steering wheel• Adheres to a wide variety of substrates• good adhesive strength in hot conditions	<ul style="list-style-type: none">• H 351-free, low labelling• light, structurally viscous• UV-resistant
Viscosity (+25°C)	medium viscous-pasty	low-viscous-pasty
Skin formation time/pot life	approx. 115 min	approx. 21 min
Pressing time	approx. 7 h	-
Tensile shear stress, +20°C	approx. 13 ^N /mm ²	approx. 17.0 N/mm ²
Solvent-free	✓	✓
Can be coated over	✓	✓
Steering wheel/flame retardant	✓	-
Foaming	✓	✓
Density	approx. 1.52 g/cm ³	approx. 1.42 g/cm ³

EXAMPLES FOR APPLICATION



1-C AND 2-C HYBRID SEALANTS AND ADHESIVES

		
The multi-talent	The controlled adhesive	The high-viscosity High Tack
COSMO® HD-100.400	COSMO® HD-200.101	COSMO® HD-100.700
<ul style="list-style-type: none">• very broad adhesion spectrum• good weather resistance & UV stability• elastic adhesive joint	<ul style="list-style-type: none">• fast and controlled full hardening• good weather resistance & UV stability• High strength of adhesive joints	<ul style="list-style-type: none">• very broad adhesion spectrum• Excellent smoothing properties• Excellent dosability
approx. 600 000 mPa.s	approx. 150 000 mPa.s	approx. 1 200 000 mPa.s
approx. 12-15 min	approx. 30 min	approx. 9 min
-	-	-
approx. 3.1 N/mm ²	approx. 4.0 N/mm ²	approx. 2.7 N/mm ²
✓	✓	✓
✓	✓	-
-	-	-
-	-	-
approx. 1.54 g/cm ³	approx. 1.49 g/cm ³	approx. 1.53 g/cm ³

An overview of our range of products

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



COSMO® Adhesives

Durably firm bond joints

COSMO® CA (Cyanoacrylates)
COSMO® PU (Polyurethane adhesives)
COSMO® CL (Cleaning agents)
COSMO® SL (Diffusion 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
Adhesives and Sealants Division

+49 (0) 2773 / 815 - 274



COSMO® Composite Panels

Unlimited possibilities for design

COSMO® Therm (heat-insulating)
COSMO® Silent (sound insulating)
COSMO® Protect (penetration-resistive)
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
Composite Panels Division:

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Our Service Center
Façade Division:

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PUDOL Cleaning and maintenance 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 area
- + Clothing care
- + Food industry
- + Household and gastronomy
- + Windows and glass
- + Dishwasher
- + Carpet and upholstery
- + Industry and workshop
- + Cars
- + Skin cleaning
- + Skin protection

Do you have any questions?

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