

TECHNICAL DATA SHEET

Bond+Seal

Elastic PU adhesive and sealant for a broad range of uses

Contents	Container	Colour	Art. no.
300 ml	Cartridge	White	0890 100 1
300 ml	Cartridge	Grey	0890 100 2
300 ml	Cartridge	Black	0890 100 3
300 ml	Cartridge	Dark brown	0890 100 4
300 ml	Cartridge	Light brown	0890 100 5
300 ml	Cartridge	Sand beige	0890 100 6
400 ml	Bag	White	0890 100 111
400 ml	Bag	Grey	0890 100 112
400 ml	Bag	Black	0890 100 113
600 ml	Bag	White	0890 100 181
600 ml	Bag	Grey	0890 100 182
600 ml	Bag	Black	0890 100 183
600 ml	Bag	Dark brown	0890 100 184
70 ml	Tube	White	0890 100 11
70 ml	Tube	Black	0890 100 31

Fields of application:

For a range of bonding and sealing tasks. Suitable for bonding and sealing in food processing plants.

Surfaces:

Excellent adhesive strength on a wide range of surface materials such as aluminium, stainless steel, steel, copper, brass, zinc, wood, MDF, HPL, decorative board and chip board, cement fibre board, cork, stone, synthetic stone, plaster, plaster board, aerated concrete, concrete, bricks, sand-lime brick, glass, porcelain, ceramic, hard foams and plastic (GFRP/CFRP, ABS, polyamide, polycarbonate, polyester, PMMA and hard PVC). Please see the optimisation table.

Not suitable for PE, PP, PTFE, silicone rubber, neoprene, polystyrene, marble, bituminous surfaces and softened plastics.

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Properties:

- For universal use – outstanding adhesive strength on a wide range of materials and surfaces
- Highly elastic
- Dampens vibrations and noise
- Long skin formation time
- Can be sanded and painted over
- Approved for use with food stuffs (ISEGA certificate)
- Non-corrosive
- Low-odour
- Free from silicones

Certificates/test reports:

- ISEGA*:
Can be used where food is processed or stored, e.g. for bonding wall and floor areas in food processing companies. Clearance certificate no.: 46567 U18

Surface pre-treatment:

The application surfaces must be clean, dry and free of grease. The processing temperature is between +5°C and +35°C.

Depending on the material and specification in the optimisation table, pre-treat with Activating Cleaner (art. no. 0890 100 60) or IPA Cleaner (art. no. 0893 223 500, 0893 223 505), as well as Primer Plus metal primer (art. no. 0890 100 61), Primer Plus for plastic/wood/stone (art. no. 0890 100 62), Deep-penetrating primer (art. no. 0890 545 10) or Varioprimer safe + easy (art. no. 0890 024 021/0890 024 101).

For more information on preparing material surfaces, refer to the optimisation table below. Carry out preliminary tests where necessary!

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Optimisation table

Surface/material	Optimisation steps*	Notes
Anodised aluminium	1. Activating Cleaner 2. Primer Plus metal primer	-
Aluminium (AlMg3, AlMgSi1)	1. Thorough cleaning with IPA cleaner	-
Non-ferrous base metals (brass, copper, bronze, etc.)	2. Sand lightly with "very fine" abrasive fleece	The use of Primer Plus metal primer is mandatory!
Stainless steel (rustproof)	3. Subsequently clean with IPA cleaner	-
Steel (St 37 etc.)	4. Activating Cleaner 5. Primer Plus metal primer	In components susceptible to corrosion: 2-component PU or epoxy corrosion protection required!
Zinc-plated steel (hot-dip or zinc-plated)		-
Zinc		-
Powder coatings (PES, EP/PES)	Activating Cleaner	Preliminary testing is recommended for applications involving significant forces or a damp environment.
2-component top-coat, water or solvent based (PUR, acrylic)	Varioprimer safe + easy	Due to the large number of paints available, this information is only a guide. Where necessary, perform preliminary tests.
2-component primers, water or solvent-based (PUR, acrylic, epoxy resin)	Varioprimer safe + easy	-
Cathodic dip coating (E-coating)	Activating Cleaner	-
Coil-coat coating	Activating Cleaner	-
ABS	1. Activating Cleaner 2. AdhesionPlus primer for P/W/S	The sanding process can be omitted for parts subjected to little load.

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Surface/material	Optimisation steps*	Notes
GFRP (unsaturated polyester), gelcoat side or SMC	<ol style="list-style-type: none"> 1. Thorough cleaning with IPA cleaner 2. Sand with "very fine" or grain 60-80 abrasive fleece and then vacuum. 3. Subsequently clean with IPA cleaner 4. Activating Cleaner 5. AdhesionPlus primer for P/W/S 	Adhesive surface must be protected against UV radiation (opaque cover).
Hard PVC	<ol style="list-style-type: none"> 1. Activating Cleaner 2. AdhesionPlus primer for P/W/S 	-
PMMA/PC (without scratch-resistant coating)	Varioprimer safe + easy	Adhesive surface must be protected against UV radiation (opaque cover).
Polyamide	Varioprimer safe + easy	-
Wood, plywood, MDF, wood products and cork	<ol style="list-style-type: none"> 1. Dedusting 2. AdhesionPlus primer for P/W/S 	-
HPL laminated panels (Resopal, Ultrapas)	Activating Cleaner	-
Glass	Varioprimer safe + easy	Adhesive surface must be protected against UV radiation (opaque cover).
Enamel, porcelain, ceramic, tiles	<ol style="list-style-type: none"> 1. Activating Cleaner or IPA cleaner 2. Varioprimer safe + easy 	-
Concrete, mineral mortar, plaster and cement fibre board	<ol style="list-style-type: none"> 1. Dedusting 2. Deep-penetrating primer 	-
Synthetic stone (Corian, Varicor)	<ol style="list-style-type: none"> 1. Activating Cleaner 2. AdhesionPlus primer for P/W/S 	-

* Follow the corresponding sequence of the individual steps

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Application:

Cut the nozzle tip to create the required bead geometry. The adhesive must be applied using a manual, battery-powered or piston-rod-style compressed-air gun to ensure a reliable finish. Apply the adhesive in the form of a triangle of beads to ensure an even layer thickness. A minimum adhesive layer thickness of 3 mm is recommended to harness the benefits of thick-coat bonding. Once opened, ensure that all containers are used up within a short period of time.

Material that has not cured can be removed using Remover (0890 100 63).

Following skin formation, can be mechanically machined and painted over without surface activation.

Technical data:

Chemical basis	1-component polyurethane
Curing through	Atmospheric moisture
Colour	White, grey, black, dark brown, light brown, sand beige
Density*	approx. 1.25 g/cm ³
Viscosity	Paste-like
Processing temperature	+5 °C to +35 °C
Temperature resistance	-40 °C to +90 °C, up to 8 h at +120 °C
Skin formation time*	approx. 45–60 minutes
Curing speed	approx. 4 mm/24 h
Change in volume (52451)	approx. -5%
Shore A hardness (DIN 53505)	approx. 40
Tensile strength (DIN 53504 S2)	1.8 N/mm ²
Elongation at tear (DIN 53504 S2)	approx. 500%
Resistance to further tearing (DIN 53515)	approx. 7 N/mm
Stretching/contraction during use	approx. 15%
Spec. resistivity (DIN 53482)	approx. 10 ¹⁰ Ω/cm
Glass transition temperature (DIN 53445)	approx. -45 °C

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Resistant to	Water, seawater and lime water, diluted inorganic acids and alkaline solutions
Short-term resistance to	Fuels, mineral oils, vegetable and animal fats and oils
Not resistant to	Organic acids, alcohol, stronger mineral acids and alkaline solutions, solvents
Shelf life	12 months (+10 °C to +25 °C) in sealed original container

*Measured at 23 °C/50% relative humidity

Remarks:

- Not suitable for glass groove sealing or adhesive bonding on other transparent materials with risk of UV back reflection.
- Direct exposure to sunlight can result in slight surface yellowing and crack formation.
- Not suitable for expansion joints in construction applications.
- PVC-based paints and paints that dry by oxidation (oil and alkyd resin-based paint) are not suitable for painting over.
- The use of Würth sealant smoothing agent can cause yellowing.
- Caution: Contact with solvents or solvent residues, in particular during processing and the linking phase, should be avoided. This can lead to permanent damage of the Bond + Seal.
- Caution: In case of high substrate moisture, very wide adhesive bead application, and/or introduced voids, air pockets, backfill foams in the application, there is a risk of bubble formation in the adhesive mass.

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This advice is based on our own research and experience. It is provided in good faith and can be considered reliable. However, due to the diverse processing, application and handling possibilities, the information provided cannot be considered legally binding. The same applies to the information provided by our technical and commercial customer service.

We recommend that users of our products perform their own tests in order to determine whether our products are appropriate for the respective use and environment. We guarantee the consistent quality of our products. We reserve the right to implement technical changes and improvements.