

SOUDASEAL 650HT

Structural Adhesive

Technical Data:

Base	MS Polymer®
Consistency	Paste
Curing System	Moisture Cure
Skin Formation (*) (20°C/65% R.V.)	Ca. 20 min.
Curing Rate (*) (20°C/65% R.V.)	3-4 mm/24h
Hardness (DIN 53505)	60 ± 5 Shore A
Specific Gravity (DIN 53479)	1,44 g/ml
Maximum Deformation	± 20 %
Short period heat resistance	At least 30 min in paint trains at 180-200°C
Temperature Resistance (fully cured)	-40°C to +100°C
Elasticity Modulus 100 % (DIN 53504)	1,50 N/mm²
Tear Strength (DIN 53504)	> 2,70 N/mm²
Elongation at break (DIN 53504)	> 350 %
Shear Strength Substrate Thickness Shear velocity	> 1,7 N/mm² AlMgSi1 2 mm 10 mm/min
Volume Change (DIN 53504)	<3%
Solvent Percentage	0%
Isocyanate Percentage	0%

(*) these values may vary depending on environmental factors such as temperature, moisture, type and size of substrates

Product:

Soudaseal 650HT is a high quality single component adhesive-sealant with high viscosity and very high adhesive strength. It is based on MS-Polymer®, chemically neutral and fully elastic.

Characteristics:

- No bubble formation
- Primer-less adhesion on almost every substrate
- Vibration and sound damping properties
- Environmental friendly - Free of isocyanates & solvents
- High performance mechanical properties
- Very high bond strength
- Quick build-up of end strength

- No bubble formation within sealant
- Colour stable and UV resistant
- Can be painted wet-on-wet in paint trains with most industrial paints
- Withstands all climatic conditions
- Minimal health and safety considerations
- Suited for application in warm, humid climates
- Very easy to tool and finish
- Can be sanded after full cure
- Long open time
- High sheer strength after full cure
- Does not contain isocyanates, silicone, solvents
- Flexible elastic rubber-movement accommodation up to 20%

Remark: The directives contained in this documentation are the result of our experiments and of our experience and have been submitted in good faith. Because of the diversity of the materials and substrates and the great number of possible applications which are out of our control, we cannot accept any responsibility for the results obtained. In every case it is recommended to carry out preliminary experiments.



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Application:

- For use in elastic structural bonding applications in the car, bus & coach, caravan, marine, train, aerospace industries where a tough & flexible bond is required
- Structural elastic bonding between metal surfaces, coated surfaces and many plastics (not PE, PP, Teflon)
- Bonding applications which pass through paint tunnels
- Structural bonding in vibrating constructions
- Connection joints in sheet metal fabrication

Packaging & Colour:

Colour: White, Black

Packaging: foil bag 600 ml

Shelf Life:

12 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +35°C.

Bonding:

Soudaseal 650HT has an excellent adhesion on almost all substrates. Soudaseal 650HT has been tested on the following metal surfaces: steel, AlMgSi1, brass, electrolytic galvanised steel, AlCuMg1, flame galvanised steel, AlMg3 and steel ST1403. Plastics that were tested include: polystyrene, polycarbonate (Makrolon®), PVC, ABS, polyamide, PMMA, glass fibre reinforced epoxy and polyester (GRP).

While producing plastics very often releasing agents, processing aids and other protective agents (like protection foil) are used. These should be removed prior to bonding. For optimum adhesion the use of Surface Activator is recommended.

NOTICE: bonding plastics like PMMA (ie Plexi® glass), polycarbonate (ie Makrolon® or Lexan®) in stress loaded applications can give rise to stress cracking and crazing in these substrates. The use of Soudaseal 650HT is not recommended in these applications.

There is no adhesion on PE, PP and PTFE (Teflon®).

Substrates:

Nature: clean, dry, free of dust and grease. We recommend the use of Soudal Surface Activator on non porous surfaces to clean and activate them.

Priming: Primer 150 may be used on porous substrates in water loaded applications.

We always recommend preliminary compatibility tests previous to application.

Bonding Layer:

We recommend a bonding layer of at least 2mm to achieve a bond with maximum elastic properties.

Health- and Safety Recommendation:

Apply the usual industrial hygiene.

Resistance to chemical agents:

Good resistance to water, aliphatic solvents, mineral oils, grease, diluted inorganic acids and alkalis

Poor resistance to aromatic solvents, concentrated acids, chlorinated hydrocarbons

Remarks:

- Soudaseal 650HT can be coated with many types of paints and varnishes. Due to the large variety of paints and coatings a compatibility test is strongly recommended. The drying times of alkyd resin based paints may increase.
- Soudaseal 650HT can be painted immediately after application "wet on wet" with water based industrial paints in paint trains at temperatures of up to 200°C during up to 30 minutes.
- Soudaseal 650HT can be applied to a wide variety of substrates. Due to the fact that specific substrates such as plastics, polycarbonate, etc, may differ from manufacturer to manufacturer, a preliminary adhesion test with these materials is imperative.
- This product can not be used as a glazing sealant
- Soudaseal 650HT can be used for adhering of natural stone, but it cannot be used a joint sealant. Soudaseal 650HT can therefore only be used on the bottom of natural stone tiles.
- When applying, make sure not to spill any sealant on the surface of materials.

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