

TECHNICAL DATASHEET

Code	Description	Size	Colour
20084	Soudal Soudaseal 270HS Industrial Adhesive	290 ml	White
20093	Soudal Soudaseal 270HS Industrial Adhesive	290 ml	Black
20083	Soudal Soudaseal 270HS Industrial Adhesive	600 ml	White

1. Description

Soudal Soudaseal 270HS is a high quality single component adhesive sealant. It is based on MS-Polymer, chemically neutral and fully elastic.

2. Characteristics

- · Very good mechanical properties
- · Does not contain isocyanates
- · Combines high end strength with certain rigidity.
- · High initial tack and fast build-up of end strength.
- · No bubble formation within sealant (in high temperature and humidity applications)
- · Colour stability and UV resistance
- · Can be painted with water based systems and industrial varnishes and
- · Very easy to tool and finish

3. Technical Data

D	MC Del
Base:	MS Polymer
Consistency	Paste
Curing System	Moisture Cure
Skin Formation	Ca. 5 min (20°C/65% R.H.)
Curing Rate	3-4mm/24h (20°C/65% R.H.)
Hardness	68±5 Shore A
Specific Gravity	1,52g/ml
Maximum Deformation:	±20%
Tear Strength	2,80N/mm² (DIN53504)
Elasticity Modulus 100%:	2N/mm² (DIN 53504)
Elongation at Break:	>250% (DIN 53504)
Temperature Resistance	-40°C until +90°C
Application Temperature:	+5°C until +35°C

^{*}This varies according to ambient conditions such as temperature, humidity, substrate etc

4. Applications

- For use in elastical structural bonding applications in industrial, automotive, marine and aerospace areas where a tough flexible rubber is required.
- Structural elastic bonding between metal surfaces, coated surfaces and many plastics (not PE, PP, Teflon).
- Structural bonding applications in the car, coach, caravan, marine, train, aerospace industries.
- · Bondings which pass through paint tunnels.
- Structural bonding in vibrating constructions. Connection joints in sheet metal fabrication.
- · Good resistance to water, aliphatic solvents, mineral oils, grease, diluted inorganic acids and alkalis.
- Poor resistance to aromatic solvents, concentrated acids, chlorinated hydrocarbons.
- Filling of static joints where non-pick gap filler is required.

5. Packaging

Cartridges of 290ml, Sausage of 600ml

6. Shelf Life

12 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +25°C.

7. Application Instructions

Surfaces

Type:

Gorilla High Strength Non-Pick has an excellent adhesion on almost all substrates

Gorilla High Strength Non-Pick has been tested on the following metal surfaces: steel, AIMgSi1, 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 these metals and plastics very often releasing agents, processing aids and other protective agents are used. These should be removed prior to bonding.

State: Clean, dry, free of dust and grease.

Preparation: Gorilla High Strength Non-Pick will stick to damp surfaces – a surface is considered wet when moisture transfer

occurs from the substrate. Porous surfaces should be primed with Gorilla Primer 150 and Gorilla 696 Surface

Activator may be used on non-porous surfaces.

Due to the range of substrates on the market recommend preliminary compatibility tests prior to commencement of application.

Bonding Limitations

Soudaseal 270HS is not suitable against the following materials; PE, PP, PTFE (Teflon), silicones, bituminous substrates, Copper or copper containing materials (Copper, Brass, Zinc-Bronze).

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 270 HS Is not recommended in these applications.

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

Application

Method: Manual or pneumatic caulking gun

Application Temperature: $+5^{\circ}\text{C}$ to $+30^{\circ}\text{C}$

Clean: Gorilla Solvent Ccleaner immediately after application and before curing

Repair: HOLDFAST® Soudaseal 270HS

Limitations

 \cdot When painted with oxidative drying paints disturbances in the drying of the paints may occur.

- Soudaseal 270 HS must not be applied to frost-bearing surfaces or if temperature will be below freezing
- The suitability of this product, for each intended use, must be determined by the purchaser prior to acceptance
- Soudaseal 270 HS may be painted with most types of lacquer used in industrial applications, however due to the large number of
 paints and varnishes available we strongly suggest a compatibility test before application. The drying time of alkyd resin based paints
 may increase.
- · Soudaseal 270 HS 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, we recommend preliminary compatibility test.

8. Maintenance and Inspection of Weather-Tightness Sealant Joints

Applies to the following joint types:

- Linear joints
- Penetration seals

Inspection

Soudal recommends that the first inspection of joints is done <u>6 months following application</u>, followed by annual inspection. Normally this inspection is combined with the inspection of the painting. The most effective is to judge the joints during a colder season as building materials shrink the most under low temperatures, resulting in the widest joints. This period is best to judge if the sealants are still able to cope with the pressure, and if detachments appear.

During inspection specifically pay attention to:

Detachments in facades of buildings can result into leakage. When leakage is noticed but the exact cause and location is unclear, the exact spot should be found by testing. We have two methods for this test:

- Test with a (garden) hose. With a hose the facade can be sprayed. While doing this we work downward towards above, while the
 inside is checked on water entering the building. When no leakage is found this way, the possibility exists the leakage will only
 appear when rain and wind pressure are combined at the same moment.
 - A wind pressure cause over pressure on the outside while under pressure on the inside appears. This can cause water to be sucked inside through very small openings. With higher building the water can be pushed up and find its way into buildings.
- Test with a smoke pipe. With a smoke pipe possible leakages can be identified more easily, especially when wind pressure occurs.

Soudal Soudaseal 270HS Industrial Adhesive

9. Health and Safety Recommendation

- · Wear gloves
- · Apply the usual industrial hygiene
- · Please refer to the MSDS for more detailed information.

Remark

The directives and data contained in this documentation is provided in good faith and accurately reflect Soudal's knowledge when its products are properly stored, handled and applied under normal conditions in accordance with Soudal's recommendations. In practice, the diversity of the materials, substrates, environments, site conditions, product storage, handling and application are such that no warranty can be given in respect to the merchantability or fit for purpose, of any product. All users must determine the product suitability for their purposes through testing. This technical data sheet and product properties may change without notice so users, suppliers and retailers of Soudal products should always check that the data sheets they have are the latest. To the maximum extent permitted by law, Soudal disclaims all warranties in relation to either the manufacture, storage and end use of the product. All orders are accepted subject to our current terms of trade. If any clarification is required, please contact Soudal Technical Services or email sales@soudal.co.nz.

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