

TECHNICAL DATASHEET

Code	Description	Size	Colour
20600	Gorilla MS Sealant	420gm	White
20601	Gorilla MS Sealant	420gm	Grey
20602	Gorilla MS Sealant	415gm	Black
20603	Gorilla MS Sealant	600ml	Black
20604	Gorilla MS Sealant	600ml	Grey
20605	Gorilla MS Sealant	600ml	White
20607	Gorilla MS Sealant	600ml	Titania

1. Description

Gorilla MS Sealant is a single component joint sealant based on MS Polymer Technology.

2. Characteristics

- · Superior flexibility
- · High bond strength on nearly all surfaces
- · Excellent adhesion and extrudability, even in adverse conditions
- · High performance mechanical properties
- · Odourless
- · Resists mould growth
- \cdot No bubble formation within sealant, even in wet and humid conditions
- · Excellent weather resistance in all climates
- No staining on porous surfaces such as marble, granite and other natural stones.
- Colour stable and excellent UV resistance
- · Paintable 1 hour after application under normal conditions with water based paints (Other systems should be tested)
- Low VOC Content
- · Free of isocyanates, solvents, halogens and acids

3. Technical Data

Base:	MS Polymer	
Consistency:	Stable Paste	
Curing System:	Moisture Cure	
Skin Formation: (20 °C/65% R.H.)	Ca. 10min	
Curing Rate: (23 °C/50% R.H.)	2mm/24h	
Hardness – Shore A:	25+/-5	ASTM C661
Specific Gravity:	1.45g/mL	
Tensile Yield:	190 psi / 1.31 N/mm²	ASTM D412
Elongation at break: (DIN 53504)	>900%	ASTM D412
Sag:	No sag in vertical displacement @ 49°C	ASTM C639
Movement Capability:	+/- 50%	ASTM C719
Stain & Colour Change:	Passes	ASTM C510 (mortar)
Staining on Porous Substrates:	No Staining Observed	ASTM C1248 (marble, granite)
Artificial Weathering:	No Cracking	ASTM C793
Elastic Recovery:	>70%	
Elasticity modulus 100%: (DIN 53504)	0.36 n/mm2	
Tear Strength: (DIN 53504)	1,30N/mm ²	
Temperature Resistance:	-40 °C until +90 °C	
VOC (%)	< 1.8%	Directive 2004/42/EG
VOC (g/litre)	26 g/L	Directive 2004/42/EG

^{*} This can vary according to environmental circumstances such as temperature, humidity, substrate, etc.

4. Applications

- Movement joints in high rise constructions, sealing between window and door frames.
- Flexible joints in marine and automotive applications.
- Weather-tight expansion joints in "Façade Systems" & many construction types, both residential, commercial, and industrial
- Gorilla MS Sealant is non-staining & suitable for sealing on natural stone on condition that joint dimensions and joint movement are respected.
- Applications that should be painted with water-based paints.

5. Packaging

Cartridge 290ml and Sausage 600ml (net content)

6. Shelf Life

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

7. Building Product Information

Manufactured BySoudal NVDistributed BySoudal Ltd

Relevant Building Code Clauses

- Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years and B2.3.1 (c) 5 years
- Clause E2 EXTERNAL MOISTURE: Performance E2.3.2.
- Clause E3 INTERNAL MOISTURE: Performance E3.3.3, E3.3.4, E3.3.5 and E3.3.6.
- Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

Contribution to compliance With NZBC

Performance B2.3.1 (b) 15 years and B2.3.1 (c) 5 years: This product achieves these durability requirements and will remain serviceable for 15 years, or more, when installed and maintained in accordance with the relevant Soudal product technical documents. Soudal maintains production & management systems in accordance within its ISO9001:2015 Quality Management System.

Performance E2.3.2: In accordance with E2/AS1. This product has been tested and is compliant with the ISO11600:2002 Type F, Class 25LM classification. soudal.co.nz. When used to seal flexible joints, as part of a roofing or wall cladding system, or around external openings, such as windows and doors, the product contributes to meeting the E2.3.2 weather-tightness requirements.

Performance E3: The product can be used to form impervious joints between sheet lining materials and also a joint between fixtures and lining materials in accordance with NZBC Acceptable Solution E3/AS1.

Performance F2.3.1: This product meets this requirement when used and applied in accordance with Soudal's installation instructions and does not present a health hazard to people occupying or using the building. Refer to the Soudal Product Technical Data Sheet and product Safety Data Sheet soudal.co.nz for further information if required.

8. Application Instructions

Surfaces

Type: All usual porous and non-porous building materials – Stone, metal (see "Limitations" below), PVC, pre-

treated wood

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

Preparation: Gorilla MS Sealant will stick to damp surfaces – a surface is considered wet when moisture transfer occurs from the substrate. Porous surfaces should be primed with Soudal Primer 150 and Soudal 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.

Joint Size

Minimum width for joints: 5mm Maximum width for joints: 30mm Minimum depth for joints: 5mm

Joint Configuration: Depth = 1/2width

Application

Method: Caulking Gun

Backing Material: PE backer rods for correct joint dimension

Application Temperature: +5°C to +30°C

Clean: Gorilla Solvent Cleaner immediately after application and before curing

Repair: With Gorilla MS Sealant Finish: With soapy solution

Chemical Resistance:

Good resistance to water, aliphatic solvents, mineral oils, grease, diluted inorganic acids and alkalis. Poor resistance to aromatic solvents, concentrated acids and chlorinated hydrocarbons.

Limitations:

Gorilla MS Sealant is not suitable against the following materials: PE, PP, PTFE (Teflon), raw Bituminous substrates, copper or copper containing materials (Copper, Brass, Zinc-Bronze)

When applying, make sure not to spill any adhesive on the surface of materials.

When using the Gorilla MS Sealant you need to consider environmental considerations when using on substrates such as "ACM" panels – in particular if the material has high thermal movement - as high levels of temperature swing variance (between daytime & night time) at the surface of the panel (+45°C>) can potentially lead to early movement of the sealant in the joint before the surface has fully skinned over. If questions, please discuss with your Soudal Territory representative.

Gorilla MS Sealant may be painted, 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.

Gorilla MS Sealant can be applied to a wide variety of substrates. Because specific substrates such as metals, plastics, polycarbonate, etc may differ from manufacturer to manufacturer, we recommend preliminary compatibility tests.

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 Gorilla 696 Surface Activator is recommended.

A total absence of UV can cause a colour change of the sealant.

This product cannot be used as a glazing sealant or for the bonding of aquariums.

Test and Certificates

- Tested and conforms to ISO 11600-F-25LM
- Meets ASTM C920 Type S, Grade NS, Class 50, Use T, NT, A & G
- IFT Certified
- New Zealand: Agriquality Approval (REF #h1540)
- New Zealand: BRANZ Appraisal No. 419
- Belgium: ATG 98.2241 (ISO 11600-F-25LM)
- Germany: MPA-NRW 22-0902 5 98 to DIN 18540-F
- UK: BBA SC 007/01 (ISO 11600-F-25LM)

9. 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 an 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.
 Wind pressure causes 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 leakage can be identified more easily, especially when wind pressure

For further details on Maintenance & Inspection of Weather-Tightness Sealant Joints please go to www.holdfast.co.nz

10. Health and Safety Recommendation

- · Apply the usual industrial hygiene.
- $\cdot\,$ For more detailed information, please refer to the SDS.

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 info@soudal.co.nz.

Last Updated: 31 July 2024

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