

# **TECHNICAL DATASHEET**

Code	Description	Size	Colour
19331	Gorilla FixALL MS Crystal Sealant and Adhesive	300g	Clear
19332	Gorilla FixALL MS Crystal Sealant and Adhesive	125g	Clear

# 1. Description

Gorilla FixALL MS Crystal Sealant and Adhesive is an optically clear, neutral, elastic, single component sealant/adhesive based on MS-Polymers.

# 2. Characteristics

- · Very easy to tool and finish
- · Completely transparent (crystal clear)
- · Permanently elastic after full cure
- · Can be painted with water based paints and a number of other systems (preliminary test required)
- · Outstanding bond strength on nearly all surfaces
- · High performance mechanical properties
- · Good extrudability even at low temperatures
- · Ecological advantages free of isocyanates, solvents, halogens and acids
- · Minimal health and safety considerations
- · Impervious to mould, contains ZnP (biocide with fungicidal action)

# 3. Technical Data

Base:	MS Polymer
Consistency:	Stable Paste
Curing System:	Moisture Cure
Skin Formation: (20°C/65% R.V.)	Ca. 4 min.
<b>Curing Rate:</b> (20°C/65% R.V.)	2 à 3mm/24h
Hardness: (DIN 53505)	38 ±5 Shore A
Specific Gravity: (DIN 53479)	1,05g/mL
Elastic Recovery: (ISO 7389)	> 75%
Maximum Deformation:	±20%
Elasticity Modulus 100%: (ISO 37)	0.6N/mm²
Max Tension: (ISO 37)	1,80N/mm²
Elongation at Break: (ISO 37)	350%
Temperature Resistance:	-40°C until +90°C (fully cured)
Application Temperature:	5°C until +35°C
VOC (%)	5%
VOC (g/litre)	<50g/litre

<sup>\*</sup>This varies according to ambient conditions such as temperature, humidity, substrate etc

### 4. Applications

- · Transparent and elastic bonding in many different construction and building applications.
- $\cdot \:$  Invisible bonding of glass and other transparent materials.
- · Joints in Bathrooms & Kitchens
- · All interior and exterior bonding and sealing applications

#### 5. Packaging

300g (net content) cartridge and 125ml tube.

# 6. Shelf Life

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

# 7. Building Product Information

Manufactured BySoudal NVDistributed BySoudal Ltd

# **Relevant Building Code Clauses**

Note:

This product is an adhesive and on its own is not within the scope of the NZ Building Code. However, when it is used as part of an internal floor, wall, or ceiling system, or with other building elements that must comply with the NZ Building Code, and it is used in accordance with that material supplier's specification and Soudal's technical literature, it will contribute to meeting the requirements of the following clauses:

- B1 Structure: Performance clauses B1.3.1, B1.3.2, B1.3.3 (a ,b, j, q), B1.3.4
- B2 Durability: Performance clauses B2.3.1-(b) not less than 15 Years, (c) not less than 5 years
- F2 Hazardous Building Materials: Performance clause F2.3.1

#### **Contribution to compliance With NZBC**

Performance B1.3.1, B1.3.2, B1.3.3 (a, b, j, q) B1.3.4: When used as an adhesive this product contributes to meeting the loading requirements that bonded lining elements are subjected to, as a result of self-weight, imposed in-use gravity loading, impact, and the effects of creep and shrinkage over time.

Performance B2.3.1 (b) 15 years and (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 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 building surfaces such as glass, pre-treated timber, PVC, metals, stone, etc.

State: Surfaces should be clean and free of dust and grease

Preparation: Porous surfaces should be primed with Gorilla Primer 150, Gorilla 696 Surface Activator may be used on non-

porous surfaces. We recommend preliminary compatibility tests previous to application.

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 use Gorilla 696

Surface Activator.

**Joint Size** 

Minimum thickness for bonding 2mm Minimum width for joints 5mm Maximum thickness for bonding 4mm Maximum with for joints 10mm Minimum depth for joints 5mm

Application

Method: Manual or pneumatic caulking gun

Application temperature: +5°C until +35°C

Clean: Gorilla Solvent Cleaner immediately after application and before curing

Finish: with soapy solution before skin formation Repair: Gorilla FixAll MS Crystal Sealant and Adhesive

### **Application Limitations**

- · Good resistance to water, aliphatic solvents, mineral oils, grease, diluted inorganic acids and alkalis. Poor resistance to aromatic solvents, concentrated acids, chlorinated hydrocarbons.
- · When painted with oxidative drying paints disturbances in the drying of the paints may occur.
- · Gorilla FixAll MS Crystal Sealant and Adhesive 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
- · Pre-testing for adhesion is intended to eliminate potential field problems. This testing will aid in determining the proper surface preparation method.
- · Gorilla FixAll MS Crystal Sealant and Adhesive may be over 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.
- · Due to the wide variety of possible substrates, Soudal recommends a preliminary compatibility test.
- · Gorilla FixAll MS Crystal Sealant and Adhesive can be applied to a wide variety of substrates. Due to the fact that specific substrates such as plastics, like polycarbonate, etc, may differ from manufacturer to manufacturer, Soudal recommends a preliminary compatibility test.
- · Do not use in applications where continuous water immersion is possible or in sanitary applications.
- · Gorilla FixAll MS Crystal Sealant and Adhesive displays very good UV stability but may discolour in extreme conditions or after many years of exposure.
- · This product cannot be used as a glazing sealant.
- · 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 Gorilla FixAll MS Crystal Sealant and Adhesive is not recommended in these applications.
- · Gorilla Fix All Crystal is not suitable against the following materials; PE, PP, PTFE (Teflon), Bituminous substrates, Copper or copper containing materials (Copper, Brass, Zinc-Bronze). Soudal® recommends a preliminary compatibility test.
- · Some plastic or rubber-based materials including Pipe Flashings may degrade the sealant due to the plasticizers used in the manufacture of these plastic materials. Please contact Soudal for suitable alternatives.
- · Not suitable for expansion joints
- The sanitary formula should not replace regular cleaning of the joint. Excessive contamination, deposits or soap remaining will stimulate the development of fungi.

Soudal recommends preliminary compatibility tests on surfaces on which Gorilla FixAll MS Crystal Sealant and Adhesive have not been applied previously.

# 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 leakages can be identified more easily, especially when wind pressure
  occurs.

# 10. Health and Safety Recommendation

· Apply the usual industrial hygiene.

### 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: 15 April 2024

Supplier contact details:	Soudal Ltd	Freephone: 0800 70 10 80		
	134 Kohia Drive	Phone: (07) 847 5540		
	Horotiu			
	Hamilton 3288	Email: info@soudal.co.nz		
	New Zealand	Website: www.soudal.co.nz		
POISON CENTRE NUMBER: 0800 764 766 (24 hours)				