

Code	Description	Size	Colour
20255	Gorilla MS Expanding Foam	500ml	White

## 1. Description

Gorilla MS Expanding Foam is ready to use one component self-expanding and 100 % isocyanate free foam. Gorilla MS Foam is filled with HCFC- and CFC-free propellants which are not harmful for the ozone layer.

## 2. Characteristics

- Excellent stability (no shrinkage or post-expansion)
- High filling capacity
- Good adhesion on most materials (except PE/PP & PTFE)
- High insulation value, thermal and acoustic
- Very good bonding properties
- Freon Free (harmless to ozone layer & "greenhouse" effects)
- High thermal and acoustical isolation
- Not UV Stable

## 3. Technical Data

<b>Basis:</b>	SMX Polymer
<b>Consistency:</b>	Stable foam, thixotropic
<b>Curing System:</b>	Moisture curing
<b>Skin Formation:</b> (FEICA TM1014)	13 minutes
<b>Cutting Time:</b> (FEICA TM1005)	45 minutes
<b>Free Foamed Density:</b> (FEICA TM1019)	Ca. 31 kg/m <sup>3</sup>
<b>Insulation Factor:</b> (FEICA TM 1020)	37mW/m.K
<b>Box Yield:</b> (FEICA TM1003)	500ml yields ca. 9 litres of foam
<b>Joint Yield:</b> (FEICA TM1002)	500ml yields ca. 9 litres of foam
<b>Shrinkage after curing:</b> (FEICA TM1004)	<3 %
<b>Expansion after curing:</b> (FEICA TM1004)	<19 %
<b>Compressive Strength:</b> (FEICA TM 1011)	Ca. 6 kPa
<b>Shear Strength:</b> (FEICA TM 1012)	Ca. 23 kPa
<b>Tensile Strength:</b> (FEICA TM 1018)	Ca. 35 kPa
<b>Elongation at Fmax:</b> (FEICA TM 1018)	Ca. 68,9%
<b>Temperature Resistance:</b>	-40°C till +90°C (fully cured)

\*This varies according to ambient conditions such as temperature, humidity, substrate etc

## H1 insulation R-Value Calculations based on thickness of Gorilla Expanding Foam Range

Product	mW/m. K (TDS)	Thickness mm									
		50	60	70	80	90	100	125	140	200	220
Gorilla PRO Expanding Foam Aerosol	29.70	1.68	2.02	2.36	2.69	3.03	3.37	4.21	4.71	6.73	7.41
Gorilla PRO Expanding Foam "CnF"	32.00	1.56	1.88	2.19	2.50	2.81	3.13	3.91	4.38	6.25	6.88
Gorilla FLEXI Expanding Foam	35.00	1.43	1.71	2.00	2.29	2.57	2.86	3.57	4.00	5.71	6.29
Gorilla SMART Expanding Foam	37.00	1.35	1.62	1.89	2.16	2.43	2.70	3.38	3.78	5.41	5.95
Gorilla MS Foam	37.00	1.35	1.62	1.89	2.16	2.43	2.70	3.38	3.78	5.41	5.95
Gorilla FR Expanding Foam	30.20	1.66	1.99	2.32	2.65	2.98	3.31	4.14	4.64	6.62	7.28
Gorilla FR Expanding Foam Aerosol	34.00	1.47	1.76	2.06	2.35	2.65	2.94	3.68	4.12	5.88	6.47
Gorilla One Shot Foam	35.40	1.41	1.69	1.98	2.26	2.54	2.82	3.53	3.95	5.65	6.21

### 4. Applications

- Mounting and sealing of windows and doorframes
- Filling of cavities around pipes
- Connecting of isolation materials and roof constructions
- Application of a soundproofing layer on motors
- Improving thermal isolation in cooling systems

### 5. Packaging

500ml SMART Aerosol canister (net)

### 6. Shelf Life

24 months in unopened packaging in a dry and cool storage place between 5°C → 25°C. Upright storage is recommended.

### 7. Building Product Information

**Manufactured By** Soudal NV  
**Distributed By** Soudal Ltd

#### Relevant Building Code Clauses

- Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years
- Clause E2 EXTERNAL MOISTURE: Performance E2.3.2.
- Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

#### Contribution to compliance With NZBC

Performance B2.3.1 (b): Assessment of durability to meet the NZBC is based on difficulty of access and replacement of the air seal, and the ability to detect failure of the air seal both during normal use and maintenance of the building when used as Air-seals (i.e. in dry, interior environments where the product is inaccessible, and completely sheltered from exposure to sunlight, chemicals, solvents and temperature extremes), they will remain serviceable for at least 15 years.

Performance E2.3.2: Complying with the requirements of NZBC Acceptable Solution E2/AS1 when installed in accordance with the design. Soudal maintains manufacturing and production records within its ISO9001:2015 Quality Management System, this product has performed successfully since it was introduced in 1999.

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

## 8. Application Instructions

### Surfaces

Type: Various porous surfaces such as wood, concrete, stone and other materials commonly used in construction. Not suitable for PE, PP & PTFE  
State: Clean, dry, free of grease and loose particles.

### Application

Method: Aerosol can, shake thoroughly (at least 20 seconds) before application  
Fill holes and cavities for 1/3 (as the foam will expand)  
Repeat shaking regularly though application process  
Canister temperature: +10°C → +30 °C  
Ambient temperature: +5°C → +30 °C  
Surface temperature: +5°C → +30 °C

Clean: Gorilla Expanding Foam Cleaner before curing  
Repair: Gorilla MS Expanding Foam

**Pre-treatment:** Moisture in the air or the substrates will cure the adhesive, which will foam slightly. Slightly moistening the substrates will speed up the cure and increase the filling properties of the adhesive. Adhesion to metal batons is determined by surface preparation. An initial wipe with Gorilla 696 Surface Activator is required.

### Limitations

- Gorilla MS Expanding Foam can be applied to a wide variety of substrates. Due to the fact that specific substrates may differ from Supplier to Supplier, Soudal recommends preliminary compatibility tests.
- Gorilla MS Expanding Foam is not UV-Resistant.

### Remarks:

- Always moisten surfaces in order to improve curing and cellular structure
- Cured MS Expanding Foam must be protected from UV-radiation by painting or applying a top layer of sealants (silicone, MS Polymer, etc)
- For the filling of large volumes apply product in layers and moisten between each layer
- Always store canister with the valve pointed upwards

*Soudal recommends preliminary compatibility tests on surfaces on which SMX Foams have not been applied previously.*

## 9. Health and Safety Recommendation

- Apply the usual industrial hygiene.
- Wear gloves and safety goggles.

### 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](mailto:info@soudal.co.nz).***

**Last Updated:** 27 March 2024

Supplier contact details:	Soudal Ltd	Freephone: 0800 70 10 80
	134 Kohia Drive	Phone: (07) 847 5540
	Horotiu	
	Hamilton 3288	Email: <a href="mailto:info@soudal.co.nz">info@soudal.co.nz</a>
	New Zealand	Website: <a href="http://www.soudal.co.nz">www.soudal.co.nz</a>