

# MultiGips

## Technical data sheet

### Gypsum surface smoothing plaster SG 90 Uni Flächenspachtel

EN 13279-1



## MAIN FEATURES

- Building material** Surface smoothing plaster based on a pre-mixed gypsum dry mortar EN 13279-1 for manual smoothing of building elements of gypsum blocks. Also for building elements of gypsum blocks with high density and for hydrophobic gypsum blocks according to EN 12859.
- Properties** High-quality, white gypsum surface smoothing plaster  
For manual application  
Soft, creamy consistency for easy, efficient application  
Practical working time of approx. 90 minutes  
Mineral  
Reaction to fire A1 (no contribution to fire load, EN 13501-1)  
EPD Environmental Product Declaration
- Performance as building element** For closing joints or for full surface smoothing  
No change to the fire resistance of the building elements made from the gypsum blocks
- Extended area of application (interior)** Also suitable for smoothing of other typical absorbent substrates and for smoothing over uneven substrates
- Special features** Certified low level of hazardous substances for improved interior air quality helps eliminate health risks.  
Fulfils the requirements for use in interiors according to the Federal Environmental Agency in the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety in the Federal Republic of Germany. Extremely low emissions.
- Documentation** **EN** [multigips.com](http://multigips.com)  
**EU** [ce.multigips.de](http://ce.multigips.de)

## TECHNICAL FEATURES

Performance feature	Building material
<b>European standard</b>	EN 13279-1 (C7)
<b>Reaction to fire, Euroclass</b>	A1, no contribution to fire
<b>Insulation against air-borne sound</b>	No performance determined (NPD)
<b>Areal thermal resistance</b>	No performance determined (NPD)
<b>Hazardous substances</b>	No performance determined (NPD)
<b>Application thickness</b>	0 – 4 mm
<b>Consumption</b>	0.8 kg/m <sup>2</sup> /mm
<b>Working time</b>	approx. 90 minutes
<b>Storage</b>	approx. 9 months, dry on Euro pallets
<b>Grain size</b>	max. 0.20 mm
<b>Flexural strength</b>	≥ 4.0 N/mm <sup>2</sup>
<b>Compressive strength</b>	≥ 8.0 N/mm <sup>2</sup>
<b>Dry density</b>	approx. 975 kg/m <sup>3</sup>
<b>Water vapour diffusion resistance coefficient <math>\mu</math></b>	approx. 8
<b>Thermal conductivity <math>\lambda</math></b>	0.32 W/mK

## ORDER INFORMATION

Performance feature	Building material
<b>Material number</b>	348
<b>Form of packaging</b>	Paper bag
<b>Contents</b>	25 kg
<b>Packaging unit</b>	40

## ENVIRONMENTAL DATA

Performance feature	Building material, building element
<b>Composition</b>	Smoothing gypsum of calcium sulphate hemihydrate ( $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$ )
<b>Hazardous constituents</b>	None
<b>Performance</b>	
<b>Emissions of volatile organic compounds (mg/m<sup>3</sup> TVOC after 3 days)</b>	0.010 <sup>1)</sup>
<b>Carcinogenic substances (mg/m<sup>3</sup> after 3 days)</b>	0.001 <sup>1)</sup>
<b>Natural radioactivity (mSv/a)</b>	≤ 0.02 <sup>1)</sup>
<b>Persistence, bio-accumulation potential, toxicity</b>	No PBT characteristics
<b>Toxicity</b>	Non-toxic
<b>Carcinogenicity, mutagenicity and toxicity to reproduction</b>	No CMR properties
<b>Bio-accumulation potential</b>	No potential (inorganic, mineral)
<b>Ecology</b>	Safe in air, water and soil
<b>For other environmental information, see also</b>	Safety data sheet according to Regulation (EC) 1907/2006 (REACH) Environmental product declarations for gypsum products of the Bundesverband der Gipsindustrie e.V.

1) Fraunhofer Institute for Building Physics, 10.2010

## APPLICATION PRINCIPLES

**Site prerequisites** Building elements of gypsum blocks do not require a plaster coating either for aesthetic reasons or to satisfy sound insulation and fire protection requirements. They are either smoothed only partially in the joint area or over the entire surface.

Only work with gypsum surface smoothing plaster when the air and building element temperature will not fall below +5 °C and no night frost is expected until complete drying of the gypsum surface smoothing plaster. If possible, the top floor ceiling should be sealed in order to greatly reduce the effects of moisture during the construction phase.

Building elements of gypsum block must be thoroughly cleaned of construction dust that could reduce adhesion prior to application of the smoothing plaster. Especially in the case of extremely dry air and/or high air and building element temperatures, the added water may be drawn out of the gypsum surface smoothing plaster relatively quickly, which can significantly impair the hydration, in other words the proper growth of the gypsum crystals for the gripping of the substrate as is necessary for achieving the rated strength. Appropriate measures must therefore be taken, such as moistening the surfaces to be smoothed. The air and building element temperature may not be below +5 °C from the time of application until complete hardening of the gypsum surface smoothing plaster.

**Smoothing application** Sprinkle approx. 1.6 kg SG 90 Uni in approx. 1 l clean, cold mixing water. After a slaking time of approximately two to four minutes, stir until achieving a workable, homogeneous consistency. No longer use material that has already begun to stiffen. Do not mix with foreign material. Clean containers and tools with water immediately after use.

Generally applied in single layers 0 to 4 mm thick. If multiple smoothing layers are required, each layer must be allowed to harden and dry completely before application of the next layer. Prime the previous layer with MultiGips Aufbrennsperre (concentrated primer), and apply the next layer only after this has dried. Perform any sanding and subsequent painting and adhesive work only after complete drying.

After completion of the smoothing work, sufficient cross-ventilation is required. To avoid uneven drying of subsequent coats during touch-ups, priming of some or all of the surface may be necessary.

**Application of claddings or coatings** Coatings of wallpaper, paints and non-woven liner as well as dispersion, latex, oil or varnish paint may be applied to smoothed building elements of gypsum block. Do not use any lime or silicate water paints!

Before any subsequent work, it may be necessary to apply a primer appropriate to the substrate and the subsequent coating/wall cladding. Exclusively pastes based on pure methyl cellulose may be used for wallpapering work. Rapid, proper and draught-free drying must be ensured especially after application of paper and fibreglass wallpapers but also after application of synthetic resin and cellulose plasters.

NOTE: If ceramic claddings, such as tile or natural stone, are to be applied over the full surface or part of the surface, building elements of gypsum blocks may not receive smoothing plaster in the relevant areas. The gypsum-based adhesive that escapes from the joints must be removed or cut off flush to the surface after hardening.

## SAFETY AND DISPOSAL

**Possible risks** The material is categorised as non-hazardous according to Regulation (EC) No. 1272/2008

**Disposal Recommendation** Disposal according to official regulations.  
**European List of Waste** 17 08 02 Gypsum-based construction materials other than those mentioned in 17 08 01. Disposal as landfill, landfill category 1 and 2 according the German ordinance on the list of waste.  
**Packaging** Bags or other packaging material must be optimally emptied and can be recycled after appropriate cleaning.

**Transport** Non-hazardous within the sense of international transport regulations.

**Safety data sheet** The information in the current safety data sheet at [ce.multigips.de](http://ce.multigips.de) applies.

## CALCULATION AND DELIVERY INFORMATION

On the basis of practical experience. Deviations due to changes to general conditions such as wall dimensions, room layout, type of construction, transport routes, etc. must be taken into account.

<b>System components</b>	<b>Unit</b>	<b>Material requirement</b>	<b>Delivery units</b> Form of packaging	Packaging unit
<b>Gypsum blocks</b> e.g. MultiGips M100	m <sup>2</sup> /m <sup>2</sup>	1	4.0 m <sup>2</sup> /package (= 12 pcs.) 8.0 m <sup>2</sup> /pallet (= 24 pcs.)	1 pallet (2 packages/ pallet)
<b>Elastic interlayer</b> AkustikPro 120-3/120-3 sk AkustikBit 1000	m/m <sup>2</sup>	1.3	25 m roll 1 m strips	4x 25 m rolls 50 m/package
<b>Gypsum-based adhesive for gypsum blocks</b> Adhesive ClassicWeiss 90 Adhesive SuperWeiss 120/SuperWeiss 200 Adhesive Hydro 90	kg/m <sup>2</sup>	approx. 1.0 – 1.5	25 kg bag	40 pcs./pallet
<b>Fill ceiling joint, close electrical slots</b> FG 70 Füll- und Zargengips FG 700 Füllgips Spezial	kg/m <sup>2</sup>	approx. 2 – 3	25 kg bag 30 kg bag	40 pcs./pallet
<b>Gypsum filler (backfilling doorframes)</b> FG 70 Füll- und Zargengips FG 700 Füllgips Spezial	kg/doorframe	approx. 17	25 kg bag 30 kg bag	40 pcs./pallet
<b>Surface smoothing plaster</b> SG 90 Uni	kg/mm/m <sup>2</sup>	approx. 0.8	25 kg bag	42 pcs./pallet

## LITERATURE

EN 12859 (2011-05) Gypsum blocks – Definitions, requirements and test methods

EN 12860 (2002-07) Gypsum based adhesives for gypsum blocks – Definitions, requirements and test methods

DIN 4103-2 (2017-09) Internal non-load bearing partitions – Part 2: Partitions made of gypsum blocks

EN 15318 (2008-01) Design and application of gypsum blocks

NOTE: In Germany gypsum blocks according to EN 12859 are used for non-load bearing partitions on the basis of German standard DIN 4103-2. The European standard EN 15318 for design and application of gypsum blocks is not applicable in Germany as it contradicts national building authority requirements.

Technical data sheet for construction product based on harmonised standard. No guarantee of being exhaustive or generally valid; legal claims against VG-ORTH GmbH & Co. KG cannot be based thereon. Only valid in conjunction with the recognized rules of construction technology, as published in the regulations of the professional associations and their professional bodies, as well as in conjunction with the technical documentation of VG-ORTH GmbH & Co. KG. Does not apply to other specified construction products/types in conjunction with their installation. Provides technical information for professional users to improve their understanding and ensure that the construction product is used and applied as intended. Does not substitute compliance with the established rules of construction technology and professional use and design under practical conditions by professional users. Warranted performance by the manufacturer for the construction product at time of market introduction. No commitment to a legally binding guarantee of certain properties or suitability for a particular application. No guarantee concerning performance characteristics of product as used, which depend on proper use. The relevant technical values for the construction product were calculated in accordance with the testing standard. To achieve the physical, structural and construction properties of MultiGips gypsum blocks, only MultiGips system components or products recommended by VG-ORTH GmbH & Co. KG may be used.

**Note on English translation** This is a translation of the technical data sheet valid in Germany. All stated details and properties are in compliance with the regulations of the EU and German standards and German building regulations. They are only applicable for the specified products, system components, application rules and construction details in connection with the specifications of the respective certificates and approvals. VG-ORTH GmbH & Co. KG denies any liability for applications outside of EU and Germany as this requires changes according to the respective national standards and building regulations.

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