

## DURAFILL® 200

Precipitated Sodium Magnesium Aluminium Silicate

### Product Description

DURAFILL® 200 is a flavourless and odourless precipitated white powder consisting of synthetic amorphous sodium magnesium aluminium silicate.

### Product Characteristics

The following specification parameters will be stated on our Certificate of Analysis.

Property	UOM	Value	Test Method
Specific surface area (BET)	m <sup>2</sup> /g	65 - 115	PHY 84/62
Moisture loss (105°C, 2h)	%	2.5 - 6.5	GRA 87/60
pH (5% aqueous suspension)		9.5 - 11.0	POT 87/61
Average Particle Size - Malvern® Mastersizer® 3000	µm	7.0 max.	PHY 15/01
DOA absorption (Brabender)	ml/100g	190 max.	PHY 08/02
Conductivity	mS	3.7 max.	KON 83/60
Whiteness	%	96.0 min	PHY 87/63

### Typical Properties and Recommended Applications

The following Typical Properties data are given for informational purposes only, and are not to be interpreted as product or in-process specifications.

Property	UOM	Value	Test Method
Whiteness	%	98.0	PHY 87/63
Compacted bulk density	kg/m <sup>3</sup>	170	PHY 87/65
SiO <sub>2</sub> in ignited product	%	79	GRA 81/61
Al <sub>2</sub> O <sub>3</sub> in ignited product	%	8.5	KOM 81/60
MgO in ignited product	%	2	KOM 87/60

In paper applications, the high absorption capacity of DURAFILL® 200 Precipitated Sodium Magnesium Aluminium Silicate prevents shine through and strike through of printing inks – especially toluene based. DURAFILL® 200 Precipitated Sodium Magnesium Aluminium Silicate improves opacity and whiteness. It can produce synergistic effects with other fillers, extender for titanium dioxide. Different to standard fillers, DURAFILL® 200 Precipitated Sodium Magnesium Aluminium Silicate does not reduce paper bulk, when fibres are replaced with the pigment. The anionic character influences wet end zeta potential. The high absorption capacity increases the demand of sizing agent. The unique combination of properties makes DURAFILL® 200 Precipitated Sodium Magnesium Aluminium Silicate an exceptional specialty filler. Typical addition rates are in the range of 1.5 % – 4.0 %.

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## Packaging Information

The standard packaging for DURAFILL® 200 Precipitated Sodium Magnesium Aluminium Silicate is:

25 kg/bag	36 bags/pallet	900 kg/pallet	one-way-pallet: 1000 x 1500 mm
500 kg/bigbag	1 bigbag/pallet	500 kg/pallet	one-way-pallet: 1000 x 1100 mm

## Handling & Storage Recommendations

Like all other finely powdered products, DURAFILL® 200 Precipitated Sodium Magnesium Aluminium Silicate has a tendency to develop dust. During handling, precautions should be taken against electrostatic discharge. The material stored in Grace's original standard packaging on the pallet under Grace's storage recommendations will meet its specifications for 12 months in bulk and/or big bags, and 24 months in bags, after the date of production. After this period of time Grace's warranty ends. Use of the product after the end of the warranty period is solely at your discretion. If the silica is stored beyond the end of the warranty period and you should decide to use the product at such time, it is recommended that you perform a quality test according to the given retest parameters. Grace disclaims all liability for performance of the product after the end of the warranty period.

## Health & Safety Information

DURAFILL® 200 is a Precipitated Sodium Magnesium Aluminium Silicate, CAS 12040-43-6.

Additional information can be found in our Safety Data Sheet (SDS). Please refer also to national laws and regulations.

## Certification

- DIN EN ISO 9001
- DIN EN ISO 14001
- DIN EN ISO 50001

## Other Information

The information contained herein is based on our testing and experience and is offered for the user's consideration, investigation and verification. Since operating and use conditions vary and since we do not control such conditions, we must **DISCLAIM ANY WARRANTY, EXPRESSED OR IMPLIED**, with regard to results to be obtained from the use of this product. Test methods are available on request.

## Contact

For detailed information, please refer to the Grace website: [www.grace.com](http://www.grace.com).