

Product Information

PHONOSORB® 551

Adsorbent for Insulating Glass Units

Product Description

PHONOSORB® 551 Adsorbent for Insulating Glass Units is a highly porous, crystalline aluminosilicate in beaded form. The pore openings in the crystals have a diameter of approximately 3 Å.

Product Characteristics

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

| Property | UOM | Value | Test Method |
|---|------|-----------|---------------|
| Total Volatile (950°C) | % | 2.0 max. | GRACE Q 107 |
| H ₂ O – Adsorption Capacity a) | % | 16.5 min. | GRACE Q 102 |
| Dust | Unit | 30 max. | GRACE Q 126 |
| Gas Desorption | ml | 50 max. | GRACE Q 125 |
| Bead Size Distribution | | | GRACE Q 149 |
| > 1.25 mm | % | 0 | (GRACE Q 101) |
| > 1.12 mm | % | 0.3 max. | |
| > 0.9 mm | % | 5.0 max. | |
| > 0.5 mm | % | 95.0 min. | |

a) 10 % r.h., 25°C

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. To receive further product and handling information please contact our local sales office.

| Property | UOM | Value | Comments |
|---|-----|-------|-------------|
| H ₂ O-Adsorption Capacity b) | % | 22 | |
| Bulk Density | g/l | 775 | GRACE Q 110 |

b) 32 % r.h., 23°C (according EN 1279-2)

PHONOSORB® 551 Adsorbent for Insulating Glass Units has been specially developed for use in insulating glass production in conjunction with solvent-free sealants. Insulating glass units filled with PHONOSORB® 551 achieve low dew point temperatures over a very long period of time and minimize pane deflections and danger of glass breakage. Due to its 3 Å pore size, PHONOSORB® 551 takes up neither air nor gases such as argon or SF₆ and is, therefore, recommended for air-filled insulating glass units as well as for gas filled units. Due to its small bead size it is mainly used in narrow insulating glass profiles and in automatic filling machines with pneumatic filling of the profiles.

www.grace.com

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PHONOSORB® 551 Adsorbent for Insulating Glass Units

Packaging Information

PHONOSORB® 551 Adsorbent for Insulating Glass Units is available in the following packaging configurations:

| | | | |
|-------------------------------------|----------------|---------------|------------------------|
| 25 kg/bag | 25 bags/pallet | 625 kg/pallet | pallet: 1200 x 1000 mm |
| 140 kg drum | 4 drums/pallet | 560 kg/pallet | pallet: 1200 x 1000 mm |
| 600 kg/ big bag on pallet (one-way) | | | pallet: 1200 x 1000 mm |

GRACE® packaging is designed to maintain the activity of PHONOSORB® 551 Adsorbent for Insulating Glass Units prior to use. As an additional precaution a temperature rise test can be performed according to Grace Method Q 108¹. Grace guarantees that the product is fit for use according to EN 1279-6 when a temperature rise of at least 34°C is achieved². Due to high variation of the Delta T method¹ we strongly advice to repeat the measurement at least 2 times when Delta T values between 30° and 34° C are obtained. For those users still working according to DIN 1286 a Delta T rise of at least 30°C means the product is “fit for use”³.

¹GRACE Technical Information: The Delta-T-Test- a Quick Activity Test for Adsorbents, ² EN 1279-6 specifies that the total volatiles can be 3% max. ³ DIN 1286 specifies that the total volatiles can be 4% max.

Handling & Storage Recommendations

PHONOSORB® 551 Adsorbent for Insulating Glass Units should be handled so as to avoid generation of dusty conditions at the workplace. When pouring into a container in the presence of flammable liquids, gases or dust, earth both containers electrically to prevent a static electric spark and the risk of explosion. Additional information can be found in our Material Safety Data Sheet (MSDS). Storage in a dry warehouse is recommended. Extended exposure to UV light degrades the big bag material and this should be avoided. Open packages should be resealed to prevent contamination and adsorption of water or other gases and vapors. The material in drums should be used within 4 years, the material in big bags within 6 months and the material in bags within 12 months (from the date of production).

Health & Safety Information

PHONOSORB® 551 Adsorbent for Insulating Glass Units is a synthetic aluminosilicate bound with a mineral clay. Additional information can be found in our Material Safety Data Sheet (MSDS). Please refer also to national laws and regulations.

ISO Certification

ISO 9001 Registered

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.

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