

ADSORBENT SORBEO MS10

(Drying and purification of gases and liquids)



DESCRIPTION

Adsorbent SORBEO MS10 is a highly porous, crystalline aluminosilicate in beaded form. The pore openings in the crystals have a diameter of approximately 10 Å. Due to its high capacity for water and CO₂ this molecular sieve is widely used for air purification in cryogenic air separation plants. It is also applied in the removal of H₂S/mercaptans and other sulphur compounds from natural gas and LPG⁽¹⁾.

APPLICATIONS

- Water vapour removal/Drying
- Air purification
- Removal of H₂S and other sulphur compounds

⁽¹⁾For any other technical gas please contact us or your local dealer

TECHNICAL SPECIFICATION (Typical Values)

Appearance	Spherical beads
Material	Crystalline aluminosilicate
Bead Size	approx. 2,5-5 mm
Bulk Density	640 g/l
Crush Strength	80 N
Total Volatile (950°C)	2,0%
Residual Water Content (LOI, 575 °C)	1,5%
H ₂ O Adsorption Capacity at 10% R.H., 25°C	23,0%
H ₂ O Adsorption Capacity at 80% R.H., 25°C	29,0%
CO ₂ Adsorption Capacity at 2 torr, 25°C	5,0%
CO ₂ Adsorption Capacity at 250 torr, 25°C	19,0%
H ₂ S Adsorption Capacity at 5 torr, 25°C	11,0%
Crystals Pore Openings	10 Å

HANDLING AND STORAGE

Adsorbent SORBEO MS10 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. Storage in a dry warehouse is recommended. 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 and in big bags within 6 months from the date of production.


HEALTH AND SAFETY INFORMATION

Adsorbent SORBEO MS10 is a synthetic aluminosilicate bound with a mineral clay. In active conditions it will release heat when adsorbing water or other substances. If a large quantity of sieve quickly adsorbs water, the molecular sieve can become hot enough to cause thermal burns of the skin; contact has to be avoided under these conditions. Information to date indicates that the synthetic aluminosilicate is not toxic and does not cause fibrosis. The product contains, however, a small amount (ca. 1 %) of quartz carried over from the mineral binders. At present, EU Regulations do not require safety labelling of products containing quartz. However, quartz has been recently classified by IARC (International Agency for Research on Cancer) as carcinogenic to humans by inhalation (Group 1). Furthermore, quartz can cause silicosis or other lung diseases on prolonged exposure. When handling Molecular Sieve Beads the concentration of respirable quartz in the working environment is expected to be well below the limits allowed by the worker protection regulations. Nevertheless, the user is responsible for controlling the working environment according to local regulations. Please refer also to relevant national laws and regulations.

First aid measures

Inhalation	Get fresh air If respiratory difficulties persist seek medical attention
Skin contact	Adsorbent does not irritate the skin
Eye contact	Rinse with water or eye-cleaning solution If irritation persists seek medical attention
Ingestion	Seek medical attention

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	Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2008 Reg. number: 200285	
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