Grace Davison Specialty Catalysts and Process Technologies

Product Information

SYLOBEAD[®] MS 562 ET Molecular Sieve for

PSA/VSA Ethanol Dehydration

Product Description

SYLOBEAD[®] MS 562 ET Molecular Sieve is a highly porous, high performance crystalline aluminosilicate in spherical form. The pore openings in the crystals have a diameter of approximately 3 Å.

Product Specifications

Available on request.

Typical Properties

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

Property	Unit	Typical Value
Bulk Density	g/l	740
Total Volatile (950°C)	%	2.0
H ₂ O-Adsorption Capacity 10% r.h., 25°C	%	17.5
H ₂ O-Adsorption Capacity 80% r.h., 25°C	%	21.5
Crush Strength	N	65
Bead Size	mm	2.5 - 5.0
Heat of Adsorption, H ₂ O	kcal/kg	1000

Recommended Applications

SYLOBEAD[®] MS 562 ET Molecular Sieve is a high performance type 3Å molecular sieve specifically formulated for Pressure/Vacuum Swing Adsorption ethanol dehydration processes. The proprietary enhanced formulation of SYLOBEAD[®] MS 562 ET Molecular Sieve provides lower effluent water content of the product ethanol and helps insure a clear, non-yellow final ethanol product.

Key features are:

- Maximum adsorption capacity for water
- Minimal attrition or breakup
- Low catalytic activity
- Enhanced adsorption mass transfer properties
- Maximum service life

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Packaging Information

SYLOBEAD® MS 562 ET Molecular Sieve is supplied in big bags and drums.800 kg/big bag on pallet136 kg/210 l drum4 drums/pallet544 kg/pallet

pallet: 1000 x 1000 mm pallet: 1000 x 1200 mm

Handling & Storage Recommendations

SYLOBEAD[®] MS 562 ET Molecular Sieve 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 Safety Data Sheet. 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 (from the date of production).

Health & Safety Information

SYLOBEAD® MS 562 ET Molecular Sieve is a synthetic aluminosilicate bound with a mineral clay. In active conditions it will release heat when adsorbing water or other substances. 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. 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. Additional information can be found in our Material Safety Data Sheet (MSDS). Please refer also to national laws and regulations.

ISO Certification

ISO 9001: 2000 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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