



TECHNICAL DATA SHEET

Setacci molecolari MS 4A

Application: Specialties

DESCRIPTION

Molecular Sieve 4A is a synthetic crystalline aluminosilicate with a regular macropore structure.

Zeolite Structure : A Type (LTA)

Pore Size: 4Å (0.4 nm)

Chemical Formula: $\text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2 \cdot n \text{H}_2\text{O}$ **APPLICATION**

Molecular Sieve 4A is a widely used adsorbent for many different applications. It displays a high water adsorption capacity already at low partial pressures and still at temperature up to 100°C.

Molecular Sieve 4A is commonly used for drying organic liquids (solvents, oils, gasolines, and other saturated hydrocarbons), air, liquid gases (propane, butane) as well as technical and noble gases (H₂, N₂, He, Ar, etc.)

REGENERATION

Regeneration of **Molecular Sieve 4A** may be carried out by increasing the temperature and/or reducing the pressure or using a suitable purge gas, resp. The purge gas temperature must be sufficiently high to warm up the molecular sieve to a level of 200 °C to 300 °C, but not exceeding 450 °C. The appearance of so-called hydrothermal conditions during the regeneration should be avoided as far as possible.

SPECIFICATIONS				
PROPERTIES		4A	4A	4A
Items	Unit	1.6 – 2.5 mm	2.5 – 5.0 mm	4 – 5 mm
Beads Size Range (nominal)	mm	1.6 – 2.5	1.6 – 2.5	4.0 – 5.0
Bulk Density (compacted)	g/l	725-795	725-795	725-795
Attrition	%wt.	Max. 0.2	Max. 0.2	Max. 0.2
Crush Strength	N/bead	Min. 25	Min. 50	Min. 60
Moisture content (as delivered)	%wt.	Max. 1.0	Max. 1.0	Max. 1.0
Water adsorption Capacity* (55% rel. hum., 20 °C)	%wt.	Min. 21.5	Min. 21.5	Min. 21.5
* Sample activated				
PACKAGING				
Air tight steel drums of 216 l (135 kg. net) ; polypropylene inliner equipped big bags of different sizes (450-850 kg. net)				
Other options available on request.				