



Molecular Sieves Na 13X

Molecular Sieves for elimination of trace contaminants

Pore size 9 Å (0.9 nm)
Chemical formula $\text{Na}_2\text{O} \times \text{Al}_2\text{O}_3 \cdot x \text{m SiO}_2 \times n \text{H}_2\text{O}$ ($m \leq 2.35$)

Resource base:

- synthetic crystalline aluminosilicate with a regular micropore structure

Particular qualities:

- highly selective adsorbent
- capable of regeneration

Application:

- elimination of trace contaminants from air and other gases
- desulphurization (sweetening) of natural gas and other fluids
- removal of mercaptans
- for drying gases and liquids
- regenerative thermos-chemical energy storage for generation of cold or heat

Items	value	1.2 – 2 mm	1.6 – 2.5 mm	2.5 – 3.5 mm	3.0– 5 mm
Beads Size Range	(nominal, mm) (approx. mesh size)	1.2 – 2.0 10 x 16	1.6 – 2.5 8 x 12	2.5 – 3.5 6 x 8	3.0 – 5.0 4 x 8
Bulk Density	(compacted, g/l)	655 - 700	655 - 700	655 - 700	655 - 700
Attrition (% wt.)	(wt.-%)	max. 0.2	max. 0.2	max. 0.2	max. 0.2
Crush Strength	(N/bead)	min. 10	min. 30	min. 40	min. 50
Moisture Content	(as delivered, wt.-%)	max. 1.0	max. 1.0	max. 1.0	max. 1.0
Water Adsorption Capacity*	(55 % rel. hum., 20 °C, wt.-%)	min. 26.5	min. 26.5	min. 26.5	min. 26.5
CO ₂ Adsorption Capacity* at 2.4 mbar CO ₂ pressure at 25 °C	(cm ³ (STP) / g)	min. 24.0	min. 24.0	min. 24.0	min. 24.0

The typical product properties are based on average values from current production. The specification data represent our standard product specifications.

Regeneration:

Regeneration of molecular sieve **13X** may be carried out by increasing the temperature and/or reducing the pressure or using a suitable purge gas, resp. The regeneration mode to be used, however, always depends on the particular conditions of the application case. Especially the possibly limited stability of a certain molecular sieve against thermal and hydrothermal exposure needs be taken into consideration. In the case of doubt please contact our technical service staff

Standard packaging:

- 650kg, net weight Big Bag
- 125kg, net weight steel drum