

PRODUCT INFORMATION

SPEC NO.: SIO - 10

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Brand Name	OBRA molecular sieve 4 Å		
Product Description	<p>OBRA molecular sieve 4 Å is a crystalline, high porous sodium alumino silicate. Gas, steams and liquids can be adsorbed reversibly or separated selectively due to the special crystal lattice with absolutely uniform, spherical cavities which are connected by channels. The large internal surface of 600 - 700 m²/g results in a strong bond of adsorption and in polar characteristics of the molecular sieve structure.</p> <p>The pore openings are approx. 4 Å across. Molecules bigger than the pore opening of the molecular sieve can not be adsorbed, smaller can.</p>		
Formula	$\text{Na}_{12}[(\text{AlO}_2)_{12} (\text{SiO}_2)_{12}] \cdot 12 \text{H}_2\text{O}$		
CAS No.	1318-02-1		
Physico-chemical Characteristics			
	Adsorption capacity (on dry basis, 40 % RH, 20 °C)	20.0 %	min.
	Moisture loss (4 h, 550 °C)	1.5 %	max.
	Bulk density	720 g/l	min.
	Particle size	1.0 – 2.0 mm	
		> 2.0 mm	10.0 % max.
		< 1.0 mm	10.0 % max.

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Application

OBRA molecular sieve 4 Å is used in various applications, such as the purification of gas, the drying of steam and liquids and the removal of CO₂ and water from air.

The reactivation of OBRA molecular sieve 4 Å takes place via heating up on 350 - 400 °C or via reduction in pressure.

Packaging

Cartons with inserted polyethylene bags à 25 kg OBRA molecular sieve 4 Å.

Steel drums with inserted polyethylene bags à 125 kg OBRA molecular sieve 4 Å.

Handling

OBRA molecular sieve 4 Å must always be kept in airtight containers to avoid pre-adsorption with water vapour. Face masks should be used at continual exposure to extensive dusting.

Note

Any details of application possibilities do not free the purchaser from the obligation of performing his own tests on the material supplied by the seller in order to determine their suitability for the intended processes and purposes. Application, use and processing of the material cannot be controlled by the seller and are thus the sole responsibility of the purchaser.