



## TECHNICAL DATA SHEET

**SETACCI MOLECOLARI 5A**

Application: Specialties

**DESCRIPTION**

**Setacci molecolari 5A** is a synthetic crystalline aluminosilicate with a regular macropore structure.

Zeolite Structure : A Type (LTA)

Pore Size: 5Å (0.5 nm)

Chemical Formula:  $x\text{CaO} \cdot (1-x)\text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2 \cdot n\text{H}_2\text{O}$ ,  $x \geq 0.65$ **APPLICATION**

- + Commonly used for drying and desulphurization (H<sub>2</sub>S) of natural gas, for generating vacuum in thermocontainers and sorption pumps, for the manufacture of protective gases and for the removal of CO<sub>2</sub>
- + Separation of normal paraffins from branched and cyclic hydrocarbons.
- + Selective adsorption and separation of polar molecules from mixtures with adsorbable but less polar molecules (e.g. preferred adsorption of H<sub>2</sub>S in presence of CO<sub>2</sub>)

**REGENERATION**

Regeneration of **Setacci molecolari 5A** 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 350 °C, but not exceeding 450 °C. The appearance of called hydrothermal conditions during the regeneration should be avoided as far as possible.

**SPECIFICATIONS**

<i>PROPERTIES</i>		<b>5A</b>
<i>Items</i>	<i>Unit</i>	<b>1.6-2.5 mm</b>
Beads Size Range (nominal)	mm Mesh size	1.6 – 2.5 8x12
Bulk Density ( compacted)	g/l	670-750
Attrition	%wt.	Max. 0.2
Crush Strength	N/bead	Min.25
Moisture content ( as delivered)	%wt.	Max. 1.0
Water adsorption Capacity ( 55% rel. hum., 20 °C)	%wt.	Min. 20.5

**PACKAGING**

Air tight steel drums of 216 l (135 kg. net) or

Polypropylene inliner equipped big bags of different sizes (450-850 kg. net)

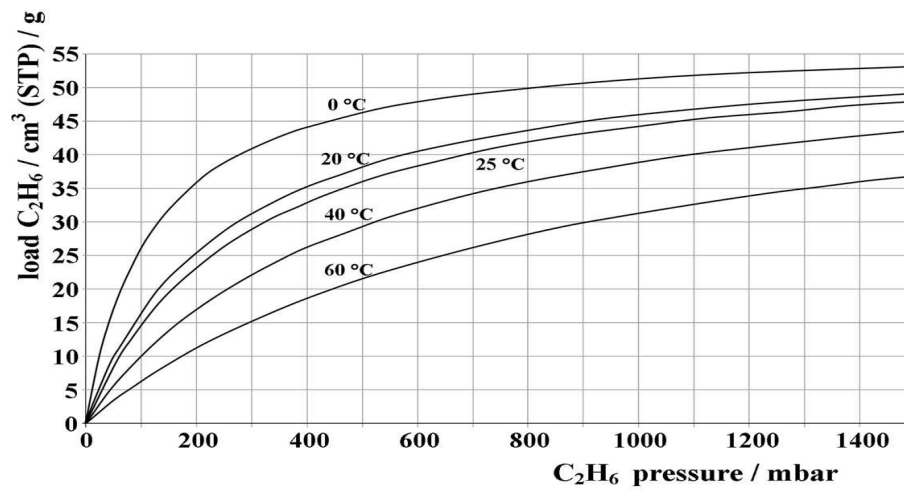
Other options available on request.



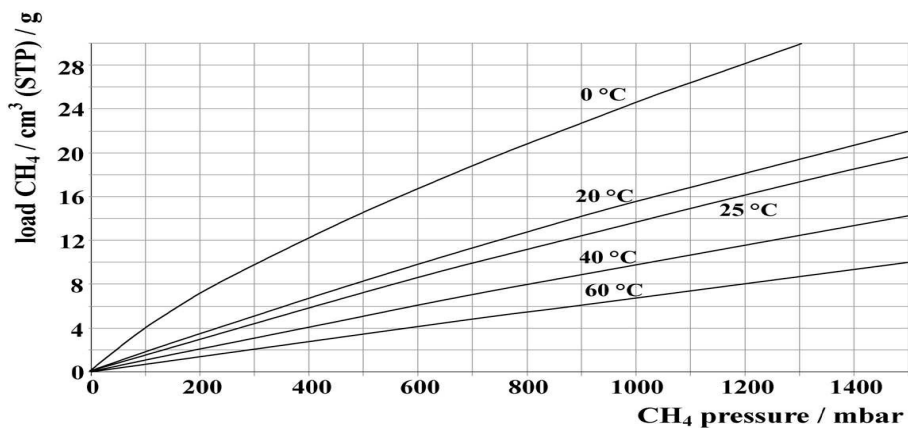
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• **C<sub>2</sub>H<sub>6</sub> Adsorption Isotherms**



• **CH<sub>4</sub> Adsorption Isotherms**

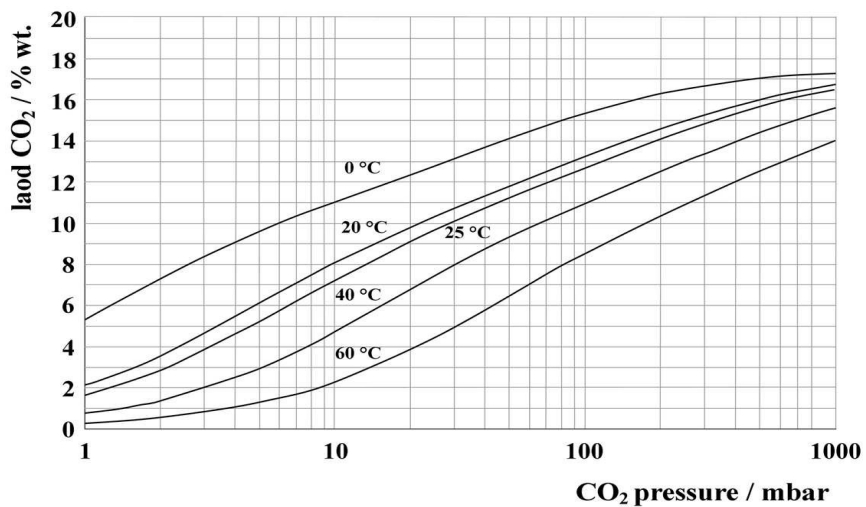




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CO<sub>2</sub> Adsorption Isotherms



CO<sub>2</sub> Adsorption Isotherms

