



# EPOCHEMMIE CO., LTD

[www.epochemmie.com](http://www.epochemmie.com)

E-mail: [sales@epochemmie.com](mailto:sales@epochemmie.com) [epochemmie@163.com](mailto:epochemmie@163.com)

## DATA SHEET

**Commodity:** Molecular sieve 13 X **Composition:** 1 Na<sub>2</sub>O: 1 Al<sub>2</sub>O<sub>3</sub> : 2.8 ± 0.2 SiO<sub>2</sub> : xH<sub>2</sub>O

**Description:** The sodium form represents the basic structure of the type X family, with an effective pore opening in the 910¼ range. Will not adsorb(C<sub>4</sub>F<sub>9</sub>)<sub>3</sub>N, for example.

### Applications:

Removal of CO<sub>2</sub> and moisture from air (air pre-purification) and other gases.

Separation of enriched oxygen from air

Removal of mercaptan and hydrogen sulphide from natural gas

Removal of mercaptan and hydrogen sulphide from hydrocarbon liquid streams (LPG, butane, propane etc.

Catalyst protection, removal of oxygenates from hydrocarbons (olefin streams).

Removal of n-chained compositions from aromatics

Production of bulk oxygen in PSA units

Production of medical oxygen in small scale oxygen concentrators

### Regeneration:

1. Dehydration: At 200-350°C and in pressure of 0.3~0.5kg/cm<sup>3</sup>, let a dryer gas goes through the sieve bed for 3~4hours. As the temperature in outlet at 150~180°C, let the bed cool off.
2. Removal of organic components: Replace the organic components with steam, then dehydrate

### Specification:

Specification	For desulfurization (H <sub>2</sub> S,SO <sub>2</sub> ,mercaptan and thiophene) in petroleum gas or natural gas		For air separation	
	Pellet:13XPI	Ball:13XBI	Pellet:13PI	Ball:13XBII
Type	Pellet:13XPI	Ball:13XBI	Pellet:13PI	Ball:13XBII
Diameter (mm)	1.6	4-6	1.6	4-6
Bulk density (kg/m <sup>3</sup> ) min	560	600	580	600
Crushing strength (N)min	20	55	20	60
Attrition loss (%Wt) max	0.5	0.5	0.5	0.5
Moisture adsorption % min	23	23	23	23
Benzene adsorption mg/g min	180	180	CO <sub>2</sub> adsorption %: 16 min	CO <sub>2</sub> adsorption %: 16 min
Removal of SO <sub>2</sub> or H <sub>2</sub> S %	SO <sub>2</sub> :12.0mmHg :30.5 H <sub>2</sub> S:11.0mmHg : 18.1	SO <sub>2</sub> :12.0mmHg :30.5 H <sub>2</sub> S:11.0mmHg: 18.1		