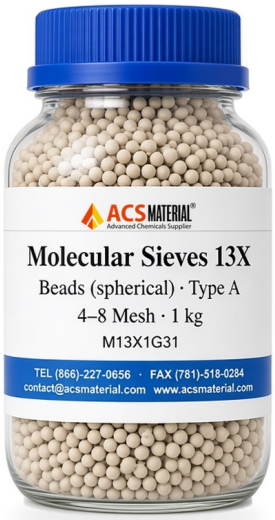
TECHNICAL DATA SHEET

Molecular Sieves 13X

Beads (spherical) · Type A: 4–8 mesh · Type B: 8–12 mesh · pore size ~9 Å · 1 kg



ACS Material Molecular Sieves 13X — Representative Packaging

ACS Material Molecular Sieves 13X, Type A: 4–8 mesh, 1 kg. Type B: 8–12 mesh is also available in 1 kg. Image shown for reference; label and packaging may vary.

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SECTION I

Product Overview

ACS Material Molecular Sieves 13X (Zeolite 13X) is a microporous molecular sieve with a pore size of ~9 Å and a SiO_2/Al_2O_3 ratio of ≈ 2.6–3.0. The hydrated zeolite phase is represented in oxide notation as $Na_2O \bullet Al_2O_3 \bullet (2.8 \pm 0.2)\ SiO_2 \bullet (6–7)\ H_2O$.

It is supplied as spherical beads in two sizes: Type A, 4–8 mesh (3.0–5.0 mm), and Type B, 8–12 mesh (1.5–2.5 mm).

SECTION II

Core Advantages

- **Pore size** — ~9 Å.
- **Low loss on ignition** — ≤1.50 wt.% at 575 °C, 1 h.
- **Spherical beads** — 3.0–5.0 mm or 1.5–2.5 mm.
- **Static water adsorption** — ≥26 wt.% at RH 50%, 25 °C.
- **Low abrasion** — ≤0.1 wt.%.
- **Two sizes** — Type A 4–8 mesh; Type B 8–12 mesh.

SECTION III

Specifications

Technical data

Specifications	
Product name	Molecular Sieve 13X; 13X Molecular Sieve; Zeolite 13X
Brand	ACS Material
Chemical formula (hydrated zeolite phase; oxide notation)	$Na_2O \bullet Al_2O_3 \bullet (2.8 \pm 0.2)\ SiO_2 \bullet (6–7)\ H_2O$
Silica-alumina ratio	SiO_2/Al_2O_3 ≈ 2.6–3.0
Pore size	~9 Å
CAS No. (zeolite component)	63231-69-6

Characterizations by type

Characterizations	Type A	Type B
Appearance	Beads (spherical)	Beads (spherical)
Diameter (mesh / mm)	4–8 / 3.0–5.0	8–12 / 1.5–2.5
Static water adsorption (wt.%), RH 50%, 25 °C	≥26	≥26
Loss on ignition (wt.%), 575 °C, 1 h	≤1.50	≤1.50
Bulk density (g/mL)	≥0.64	≥0.65
Abrasion (wt.%)	≤0.1	≤0.1
Compressive strength (N)	≥50	≥30

Ordering information

Type	Package	Product No.
Type A: 4–8 mesh	1 kg	M13X1G31
Type B: 8–12 mesh	1 kg	M13X2G31

For other quantities, please contact us at contact@acsmaterial.com.

SECTION IV

Applications

1) Gas purification in air separation units, removing water and carbon dioxide.

2) Drying and desulfurization of natural gas, liquefied petroleum gas and liquid hydrocarbons.

3) Catalyst carrier.

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