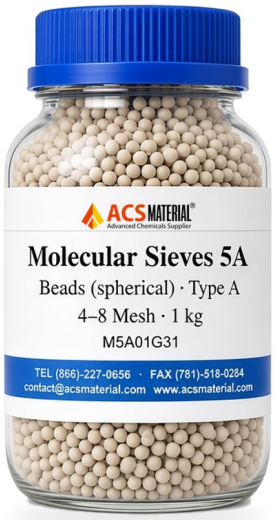
TECHNICAL DATA SHEET

Molecular Sieves 5A

Beads (spherical) · Type A: 4–8 mesh · Type B: 8–12 mesh · pore size ~5 Å · 1 kg



ACS Material Molecular Sieves 5A — Representative Packaging

ACS Material Molecular Sieves 5A, 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 5A (Zeolite 5A) is a microporous molecular sieve with a pore size of ~5 Å and a SiO_2/Al_2O_3 ratio of ≈ 2. The representative formula of the hydrated zeolite phase is $3/4CaO \bullet 1/4Na_2O \bullet Al_2O_3 \bullet 2SiO_2 \bullet 9/2H_2O$.

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** — ~5 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.
- **Water adsorption** — ≥21 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 5A; 5A Molecular Sieve; Zeolite 5A
Brand	ACS Material
Representative formula of the hydrated zeolite phase	$3/4CaO \bullet 1/4Na_2O \bullet Al_2O_3 \bullet 2SiO_2 \bullet 9/2H_2O$
Silica-alumina ratio	$SiO_2/Al_2O_3 \approx 2$
Pore size	~5 Å
CAS No.	69912-79-4

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	≥21	≥21
Loss on ignition (wt.%), 575 °C, 1 h	≤1.50	≤1.50
Bulk density (g/mL)	≥0.66	≥0.66
Abrasion (wt.%)	≤0.1	≤0.1
Compressive strength (N)	≥60	≥30

Ordering information

Type	Package	Product No.
Type A: 4–8 mesh	1 kg	M5A01G31
Type B: 8–12 mesh	1 kg	M5A02G31

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

SECTION IV

Applications

1) Natural gas drying, desulfurization and decarbonation.

2) Nitrogen and oxygen separation, separation of nitrogen and hydrogen, and preparation of oxygen, nitrogen and hydrogen.

3) Dewaxing of petroleum, separation of normal hydrocarbons from branched hydrocarbons and cyclic hydrocarbons.

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