TECHNICAL DATA SHEET

SAPO-11

Medium-pore silicoaluminophosphate molecular sieve · AEL framework, one-dimensional 10-ring channels · H^+ form · calcined · BET surface area ≥180 m^2/g · 100 g / 1 kg



ACS Material SAPO-11 — Representative Packaging

ACS Material SAPO-11, 100 g (MSSA1121). Also available in 1 kg (MSSA1102). Image shown for reference; label and packaging may vary.

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SECTION I

Product Overview

SAPO-11 is a crystalline, microporous silicoaluminophosphate molecular sieve with AEL framework topology and one-dimensional 10-membered-ring channels. Its framework contains aluminum, phosphorus and silicon. The nominal elliptical channel opening is approximately 0.39 × 0.63 nm (literature value); this describes the SAPO-11 framework and is not a batch-specific pore-size measurement.

ACS Material SAPO-11 is supplied as a white, calcined powder in the H^+ form. Typical SEM images are included in this data sheet.

SECTION II

Core Advantages

- **Framework** — AEL topology; one-dimensional 10-ring channels.
- **Composition** — framework contains Al, P and Si.
- **Ionic form** — H^+ form, supplied calcined.
- **Channel opening** — ~0.39 × 0.63 nm (literature value).
- **Surface area** — BET ≥180 m^2/g; pore volume ≥0.16 cm^3/g.
- **Pack sizes** — 100 g and 1 kg.

SECTION III

Specifications

Technical data

Specifications	
Product name	SAPO-11 silicoaluminophosphate molecular sieve
Brand	ACS Material
General composition (oxide notation)	$(SiO_2)x(Al_2O_3)y(P_2O_5)z$
Framework	AEL; one-dimensional 10-membered-ring channels
Nominal elliptical channel opening	approximately 0.39 × 0.63 nm (literature value)
Ionic form	H^+ form
Appearance	White powder
Supplied state	Calcined

The general composition notation represents variable composition and does not specify a fixed stoichiometry. The channel dimensions describe the SAPO-11 framework and are not a batch-specific pore-size measurement.

Characterizations

Characterizations	Value
BET surface area (m^2/g)	≥180
Pore volume (cm^3/g)	≥0.16
Purity (%)	>95

Selected composition parameters, expressed as oxides (wt%)

Parameter	Value
SiO_2	approximately 6
Al_2O_3	approximately 48
Na_2O	≤0.2

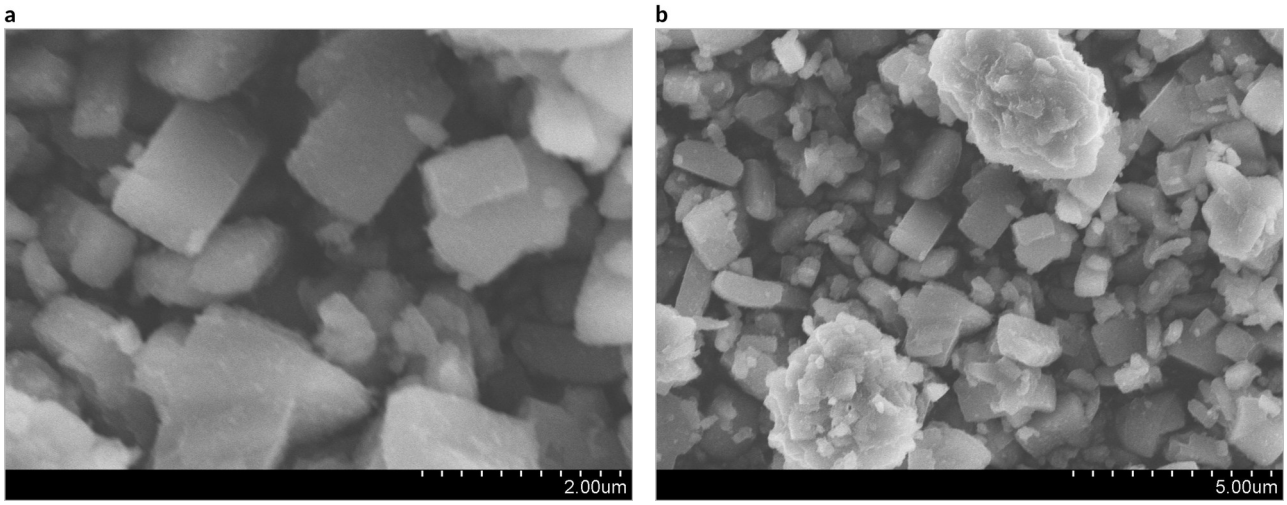
These selected oxide values are reproduced from existing ACS Material product documentation and do not constitute a complete compositional analysis. They do not establish the presence of the oxides as separate ingredients.

Ordering information

Package	Product No.
100 g	MSSA1121
1 kg	MSSA1102

Please contact us at contact@acsmaterial.com for a quote if your order quantity is larger than 10 kg.

Typical data



a SEM image of ACS Material SAPO-11, ×20.0k (scale bar 2.00 µm). **b** SEM image, ×8.00k (scale bar 5.00 µm).

SECTION IV

Applications

Potential uses include catalysis, catalyst support development and adsorption research. Suitability and performance depend on the formulation, any additional active components and the operating conditions.

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