



Technical Data Sheet

ACS Material Microporous Titanium Silicalite-1 Molecular Sieve (TS-1)

Table of Contents

[1 – Preparation Method](#)

[2 – Characterizations](#)

[3 – Application Fields](#)

Contact Information:

Manufacturer: ACS Material, LLC.

Address: 959 E Walnut St. Suite 100

Pasadena, CA 91106, USA

Phone: (866)-227-0656

Fax: (781)-518-0284

E-Mail: contact@acsmaterial.com

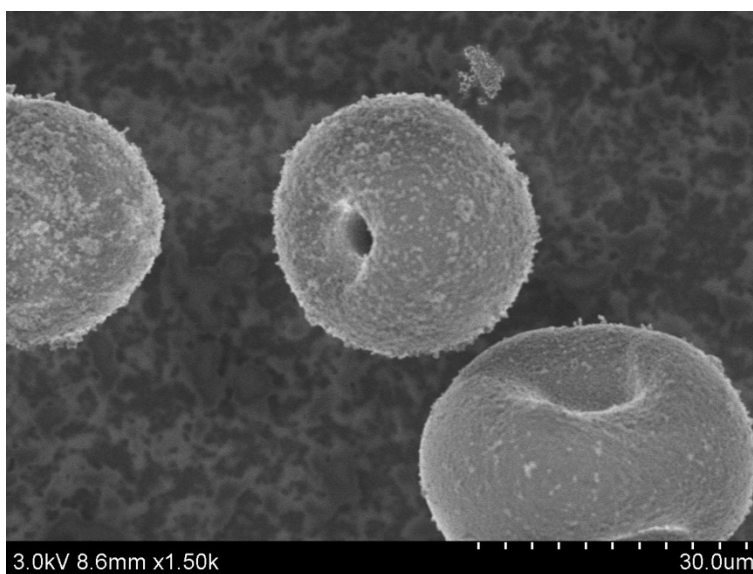
Revision: 070718

1. Preparation Method

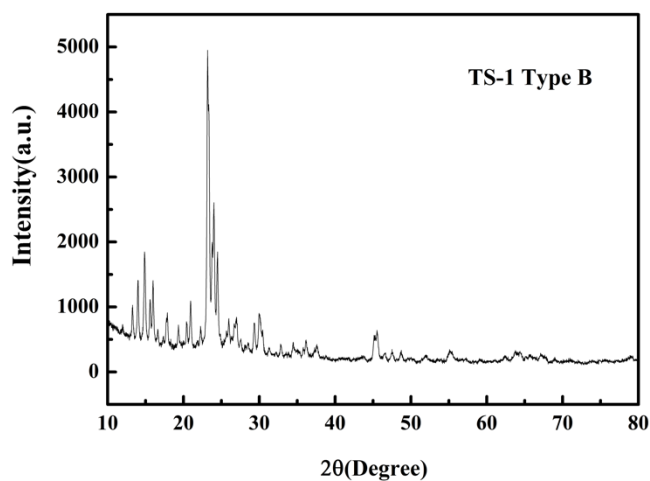
Hydrothermal Method

2. Characterizations

Form:	Powder (Type B)
SiO₂/TiO₂ Molar Ratio:	≥25
Particle Size (μm):	20-50
Pore Diameter (nm):	0.5
BET surface area (m²/g):	360-420
Comparative Crystallinity (%):	>95
Na₂O (%):	<0.1
Cation:	H ⁺



Typical SEM Image of ACS Material TS-1 (Type B)



Typical XRD Analysis of ACS Material TS-1 (Type B)

3. Application Fields

- 1) Alkene epoxidation
- 2) Cyclohexanone ammoxidation
- 3) Alcohol oxidation
- 4) Oxidation of saturated hydrocarbon
- 5) Hydroxylation of aromatic hydrocarbons

Disclaimer: ACS Material, LLC believes that the information in this Technical Data Sheet is accurate and represents the best and most current information available to us. ACS Material makes no representations or warranties either express or implied, regarding the suitability of the material for any purpose or the accuracy of the information contained within this document. Accordingly, ACS Material will not be responsible for damages resulting from use of or reliance upon this information.