

HIGH-SILICA ZEOLITE

High-silica zeolite is a general term for zeolites rich in the silica component (with a $\text{SiO}_2/\text{Al}_2\text{O}_3$ molar ratio of 10 or higher), and the high-silica zeolite provided by our company has an MFI structure. This material has features such as excellent heat resistance, hydrophobicity, and strong solid acidity, and is expected to be utilized as a functional material.

In addition to the modification of zeolite by ion exchange with various metals, our company's isomorphous substitution technology can substitute Al atoms in the zeolite skeleton with other metal atoms (Ga, In, Ti).

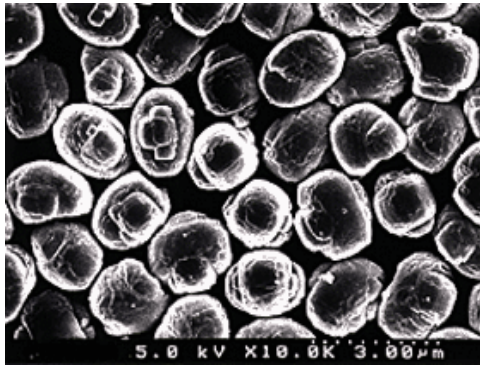


Fig.1 SEM photograph of high-silica zeolite.

Basic Properties

- Effective micropore size ... 6 Å
- Specific surface area 350 to 500 m^2/g
- Ignition loss < 10%
- Heat resistance 550 to 1,200°C

Application Examples

- Purification catalysts for high-temperature exhaust gases
- Catalysts exhibiting little degradation in activity
- Highly selective catalysts

Important notes

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