

M S D S

MATERIAL SAFETY DATA SHEET

Issue Date : 17 May 2002

Product Name : ZEOFILL

1. Company Details

Company Name: Shin Tohoku Chemical Industry Co.,LTD
Address: 1-4-10 Kamisugi Aoba-ku Sendai Miyagi 980-0011 Japan
Telephone: 022-225-2724
Fax: 022-225-2725
Website: <http://www.s-zeolite.com> (Japanese Only)

2. Product Identification

Product Name: ZEOFILL
Product description: Natural Zeolite;Mordenite
CAS No.: 12173-98-7
Chemical Name: aluminosilicate
Synonyms: Mordenite
Formula: $\text{Na}(\text{AlSi}_5\text{O}_{12}) \cdot 3\text{H}_2\text{O}$

Chemical Composition:

SiO ₂	72.1 %
Al ₂ O ₃	12.9 %
Fe ₂ O ₃	0.7 %
CaO	2.6 %
K ₂ O	2.1 %
Na ₂ O	1.8 %
H ₂ O	7.0 %
Other	0.8 %

3. Hazards Identification

Main Hazards: Not classified as hazardous. Possibility of generation on handling.

Health Effects(Eyes): Dust can cause transient irritation by abrasion.

Health Effects(Skin): Dust may cause irritation by abrasion.

Health Effects: Inhalation of the dust may cause irritation the mucous membrane and upper airways. Symptoms can include sneezing,coughing and breathing difficulties.

4.First Aid Measures	
Swallowing:	If ingested in large quantities contact physician for permission to induce vomiting.
Inhalation:	Remove the person to fresh air.
Eye Contact:	Immediately flush eyes with water for 15 minutes. If irritation develops seek medical attention.
Skin Contact:	Wash skin thoroughly soap and water.
5. Fire –Fighting Measures	
Zeolite is not combustibile in case of fire compatible with all extinguishing media.	
6.Accidental Release Measures	
No toxic effects. Clean and recover as suitable. Do not generate dust and collect in suitable containers for recovery or disposal. Dispose of in a landfill.	
7.Handling And Storage	
Handling:	Avoid creating dust. Avoid inhaling dust.
Storage Precautions:	Store in a cool dry place, out of direct sunlight. Not classified as a Dangerous Good for the transport by road and rail.
8.Exposure Controls / Personal Protection	
Respiratory Protection:	Dust respirator if conditions are dusty.
Ventilation:	Local exhaust ventilation is recommended when dust is likely to be generated from the handling of the material.
Eye/Skin Protection:	Use goggles/face shield, pvc gloves and normal work wear overall.
9.Physical and Chemical Properties	
Physical State(20°C):	Solid
Color:	White, Pale yellow
Odour:	None
Loose Bulk Density:	0.65 (g/cm ³)
Packed Bulk Density:	2.3 (g/cm ³)
Melting Point:	1250°C
Boling Point:	Not Relevant
Freezing Point:	Not Relevant
Vapour Pressure:	Not Relevant
Solubility in Water:	Not Soluble
pH Unites:	5.6

10.Stability and Reactivity

Stability: Stable under normal conditions of use.
Conditions to Avoid: Not Applicable
Hazardous polymerization: Will not Occur
Material to Avoid: Strong Oxidizing Agents

11.Toxicological Information

Inhalation: Inhalation of the dust may cause irritation the mucous membrane and upper airways.
Eye Contact: This material is irritant to eyes.
Skin Contact: The degree of irritation was insufficient to warrant labeling as a skin irritant.

12.Ecological Information

Mobility: This product is not volatile and insoluble and will accumulate in the ground.
Persistence/Degradation: This product is resistant to biodegradation.

13.Disposal Considerations

Dispose in a landfill. Dispose of in accordance with all applicable local and national regulations.

14.Transport Information

Avoid getting wet by moisture and water.

15.Other Information

The information on this MATERIAL SAFETY DATA SHEET(MSDS) is believed to be accurate and it is the best information available to Shin Tohoku Chemical Industry.,Co.LTD.