MATERIAL SAFETY DATA SHEET

Product Name: NaY Zeolite
MSDS No.: Z200601
Effective Date: 03 / 01 / 2007
Manufacturer: Qingdao Wish Chemicals Co., Ltd.

1. Chemical Product and Company Identification
Product Name: NaY Zeolite
CAS No: 308081-05-2
Molecular Formula: mNa₂O·Al₂O₃·nSiO₂·xH₂O
Synonyms: Zeolite, NaY Zeolite Powder

2. Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>wt%</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>L.O.I.</td>
<td>≤25</td>
<td>No</td>
</tr>
<tr>
<td>Cristallinity</td>
<td>≥90</td>
<td>No</td>
</tr>
<tr>
<td>Na₂O</td>
<td>10-13.5</td>
<td>No</td>
</tr>
</tbody>
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3. Hazards Identification

Emergency Overview
Appearance: White powder
Caution! May cause eye and skin irritation.
Health Rating: 0 – None
Flammability Rating: 0 – None
Reactivity Rating: 0 – None
Contact Rating: 1 – Sight
Lab Protective Equip: GOGGLES; LAB COAT

Potential Health Effects
Inhalation: May cause respiratory tract irritation.
Ingestion: May cause irritation of the digestive tract. Low hazard for usual industrial handling.
Skin Contact: May cause skin irritation.
Eye Contact: May cause eye irritation.
Chronic Exposure: No information found.
Aggravation of Pre-existing Conditions: No information found.

4. First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: If large amounts were swallowed, drink 2-4 cupfuls of milk or water and get medical advice as soon as possible.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

6. Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in section

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the protective equipment section. Avoid generating dusty conditions. Provide ventilation.

7. Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid breathing dust and vapor. Avoid contact with eyes, skins, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

8. Exposure Controls, Personal Protection

Airborne Exposure Limits: None established.

Ventilation System: In general, dilution ventilation is a satisfactory health hazard control for this Substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.
Personal Respirators: For conditions of use where exposure to the substance is apparent and engineering controls are not feasible, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full facepiece positive-pressure air-supplied respirator.

WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear protective gloves and clean body-covering clothing.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Eye Protection: Use chemical safety goggles or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Physical State: Powder
Appearance: White
Odor: Odorless
Solubility: Negligible(<0.1%)
Specific Gravity: Not available.
PH:<11
Boiling Point: Not available.
Freezing/Melting Point: Not available.
Vapor Density: Not available.
Vapor Pressure: Not available.
Evaporation Rate: Not available.

10. Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Hazardous Decomposition Products: Has not been reported.
Hazardous Polymerization: Has not been reported.
Incompatibilities with Other Materials: Moisture.
Conditions to Avoid: Excess heat, exposure to moist air to water.

11. Toxicological Information

LD50/LC50: Not available.
Carcinogenicity: No information found.
Epidemiology: No information found.
Teratogenicity: No information found.
Reproductive Effects: No information found.
Mutagenicity: No information found.
Neurotoxicity: No information found.
12. Ecological Information
Environmental Fate: No information found.
Environmental Toxicity: No information found.

13. Disposal Considerations
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. Transport Information
D.O.T. Labels Required: None
D.O.T. Shipping Name: Not available.
Special Provisions for Transport: Not applicable.
IATA(for international shipments):
Not hazardous from the standpoint of transportation.

15. Regulatory Information
US FEDERAL
TSCA: CAS#1318-02-1 is not listed on the TSCA inventory.
Health & Safety Reporting List: None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules: None of the chemicals in this product are under a Chemical Test Rule.
Section 12b: None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule: None of the chemicals in this material have a SNUR under TSCA.
CERCLA Hazardous Substances and corresponding RQs: None of the chemicals in this material have an RQ.
SARA Section 302 Extremely Hazardous Substances: None of the chemicals in this product have a TPQ.
Section 313: No chemicals are reportable under Section 313.
Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depletors.
This material does not contain any Class 2 Ozone depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.
STATE: #1318-02-1 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65: California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

Safety Phrases:
S 24/25 Avoid contact with skin and eyes.
S 37 Wear suitable gloves.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 28A After contact with skin, wash immediately with plenty of water

WGK (Water Danger/Protection)
CAS#1318-02-1: No information available.

Canada-DSL/NDSL: None of the chemicals in this product are listed on the DSL or NDSL list.

Canada-WHMIS: This product has a WHMIS classification of D2B. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.