MATERIAL SAFETY DATA SHEET

Complex Sodium disilicate Na2O2SiO2

1. IDENTIFICATION OF PRODUCT AND MANUFACTURER

Trade name: Complex Sodium Disilicate
Manufacturer: CHINA

2. COMPOSITION AND INFORMATION OF INGREDIENTS

Formal substance name: Complex Sodium disilicate  
Name of chemical group: Sodium silicates

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No.</th>
<th>EINECS No.</th>
<th>Concentration</th>
<th>Hazards symbols and classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium disilicate</td>
<td>1344-09-8</td>
<td>215-687-4 231-791-2</td>
<td>Na2Si2O5</td>
<td>Xi; R41, R37/38</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Human health effect: High pH product. May cause strong irritations of skin. Sprayed product may cause strong irritations of respiratory system, and may cause serious eye injuries.
Safeness effect: Reacts with acids violently.
Ecological effect: May cause adverse effect in environment on account of high pH.

4. FIRST AID MEASURES

Health effects and symptoms: Irritation of skin, eyes and respiratory system
Inhalation: Remove to fresh air. Ensure calmness in optional position. Protect from temperature drop. In case of dyspnoea, administer oxygen. If no recovery, call physician immediately.
Skin contact: Rinse irritated areas with fresh water (not hot) for at least 15 min. Do not use neutralizing substances. Put sterile dressing on irritated areas. Ensure medical attention.
Eye contact: Immediately flush eyes with plenty of water at least 15 min. Put sterile dressing. Ensure medical attention.
Ingestion: Do not induce vomiting. Drink immediately egg white or milk. Besides do not drink anything. Do not drink neutralizing substances (acidic) either. Ensure medical attention.

5. FIRE-FIGHTING MEASURES

This product is non-combustible, not feed the burning.

6. ACCIDENTAL RELEASE MEASURES

Handling: Avoid contact with skin and eyes. Avoid inhalation of dust.
Personal protection: Use rubber gloves, goggles, body-covering protective clothing and respirator.
Environmental protection: Avoid soil and water pollution.
Refine methods: Collect spilled material in containers. Avoid contact with water not to form alkaline pool. Especially avoid waterways pollution.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes and clothes. Use gloves, goggles, body-covering protective clothing and respirator.
Storage: In dry, roofed rooms. No more than 8 layers of sacks.
Unsuitable materials: No storage in containers made or covered of zinc, aluminum.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION
Exposure controls and personal protection:
Engineering protect agents: Ventilation to maintain breezy and dry room
Respiratory protection: Respirator
Hand protection: Rubber gloves
Eye protection: Goggles
Body protection: Body-covering clothing
Preventive measures:
- Equip storage and work zones with eye cleaning device.
- To dissolve, add product to water.
- Don’t mix and use with acids or acidic products.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium exchange capacity</td>
<td>&gt;=400 mgCaCO3/gCSDS</td>
</tr>
<tr>
<td>Humidity</td>
<td>&lt;=5%</td>
</tr>
<tr>
<td>PH value</td>
<td>&lt;=12</td>
</tr>
<tr>
<td>SiO2</td>
<td>&gt;=20%</td>
</tr>
<tr>
<td>Whiteness</td>
<td>&gt;=80%</td>
</tr>
<tr>
<td>Solubility</td>
<td>soluble</td>
</tr>
<tr>
<td>Visual specific weight</td>
<td>0.25-1</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY
Stability: Stable under normal conditions
Avoid: Atomization and contact with water.
Avoid materials: Made or covering of zinc, aluminum, tin and lead. Acidic solutions.

11. TOXICOLOGICAL INFORMATION
Base: Basic information about mean ingredient of product
Diffusion ways: Ingestion, contact with skin, dust inhalation
Acute toxicity: No data
Irritation force:
· Skin Strong irritant effect
· Eye Risk of serious eye injuries
· Respiratory system Irritant in case of dust
· Digestive system Strong irritant effect because of high pH
Mutagenic effect: Not classified
Cancerigenic effect: Not classified
Reproductiveness effect: Not classified as harmful
Long-term exposure: Product may cause atrophy of respiratory system mucosa, skin, throat irritation, cough, difficulty breathing, nasal septum injuries.

12. ECOLOGICAL INFORMATION
Base: Basic information about mean ingredient of product and other alkalis.
Toxicity: Product indicates slight toxicity for water organisms.
Biodegradation: The material as inorganic product is non-biodegradable.
Persistence: It is considered, that the material is persistent
Bioaccumulation: It is considered, that the material is non-bioaccumulative
Other information: It is considered, that material indicates slight toxicity for soil organisms

13. DISPOSAL CONSIDERATION
Precaution: See paragraph 7, before use product containers.
Waste removal: If possible, recover and reuse.
Product utilization: If possible, recover and reuse. In other case, dissolve in water, correct pH of solution to approx. 8. Waste obtained during neutralization dispose according to local Environmental Protection Agency directives.
Containers removal: Container should be treated as hazardous waste, if not fulfill the requirements for non-hazardous wastes

14. TRANSPORT INFORMATION
Railway and road transportation: This material is not regulated as hazardous material for transportation in the meaning of RID and ADR rules.

15. REGULATORY INFORMATION
Classification and labeling: Normalized
Hazard symbol: Xi
Hazard indication: Irritant
R-phrases:
R41 Risk of serious eye injuries
R37/38 Irritating respiratory system and skin
S-phrases:
S-1/2 Store in closed area and keep out of reach of children
S23 Do not breathe sprayed liquid
S24/25 Avoid contact with skin and eyes
S26 In case of contact with eyes rinse immediately with plenty of water and seek medical advice
S36/37/39 Wear suitable protective clothing, gloves and goggles or face protection
S60 This material and/or its container must be disposed of as hazardous waste

16. OTHER INFORMATION
APPLICATION: Component of industrial washing agents, components of household chemistry products.
The information on this Material Safety Data Sheet is believed to be accurate according to our knowledge and experience regarding product and are not sufficient. It is related to the product only according to its properties. In case of combinations and mixtures to make sure if a new danger do not appear.