

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND OF THE COMPANY

■ Product name : Nucleating Agent 3988

■ Manufacturer : QINGDAO JADE NEW MATERIAL TECHNOLOGY CO.,LTD

Address: Room 411, Building2, No318 Longshui Road,

Licang District, Qingdao, Shandong Province, China.

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■ Intended use : Plastic additive (Nucleating agent)

2. COMPOSITION / INFORMATION ON INGREDIENTS

| Number | % w/w | CAS No. | Chemical name |
|--------|-------|-------------|---|
| 1 | 100 | 135861-56-2 | 1,3:2,4-Bis(3,4-dimethylbenzylideno) sorbitol |

3. PHYSIOLOGICAL AND HEALTH HAZARD DATA

■ Effects of overexposure :

Eye, May irritate eyes. Not known to cause permanent injury to eye tissue.

Inhalation, May cause irritation to the respiratory system.

Skin, May cause slight skin irritation Prolonged skin contact may cause temporary irritation.

4. FIRST AID MEASURES

| | |
|------------|---|
| Eye | Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if irritation persists after washing. |
| Inhalation | Move the exposed person to fresh air at once. Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Get medical attention if symptoms occur. |
| Skin | Wash skin thoroughly with soap and water. If skin irritation or an allergic skin reaction develops, get medical attention. |
| Ingestion | Give one or two glasses of water if patient is alert and able to swallow. Seek immediate medical attention. Do not induce vomiting. Never give liquid to an unconscious person. |

5. FREE-FIGHTING MEASURES

| | |
|-------------------------------------|---|
| Fire Fighting Media | Water spray, foam, dry powder or carbon dioxide. |
| Unusual Fire & Explosion | High concentrations of dust may form explosive mixture with |
| Hazards Remarks | air. The dust explosion class for this product is St1 |

6. SPILL OR LEAK PROCEDURE

■ Steps to be taken in case of release or spill :

- Wear appropriate protective equipment as specified in section 8
- Transfer spilled material to secure containers.

■ Waste disposal method :

All materials should be packaged, labeled, transported according to the local solid waste disposal regulation.

7. HANDLING AND STORAGE

■ Handling

- Avoid contact with skin and eyes
- When using do not eat, drink or smoke

■ Storage

- Store at ambient temperature
- Store in a dry place

8. SPECIAL PROTECTION INFORMATION

■ Respiratory protection :

- Handle in the presence of adequate ventilation.
- Wear a dust mask if dust is present.

■ Protective gloves :

Use chemical resistant gloves.

■ Eye protection :

Use chemical splash goggles.

■ Other protective equipment :

Adequate clothing to minimize physical contact.

■ Other instructions : N.A

9. PHYSICAL DATA

■ Appearance : White powder

■ Melting point : 250~265 °C

■ Vapor Pressure(mmHg) : N.A

■ Water solubility : Insoluble

■ Pct volatiles by weight at 100 °C : < 1.0%

■ Solubility (in Water) : Insoluble in water

10. STABILITY AND REACTIVITY

Stability

This product is stable at ambient conditions.

Hazardous Polymerization

Hazardous polymerization will not occur.

Materials to Avoid

Contact with acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates).

Hazardous decomposition products

Decomposition may produce fumes, smoke, oxides of carbon and hydrocarbons.

11. TOXICOLOGICAL INFORMATION

- Threshold limit value : Not established.
- Median lethal dosage : LD₅₀ (Rats, Oral) - 12 g/kg

12. ENVIROMENTAL HAZARDS

N. A

13. DISPOSAL CONSIDERATION

- Waste disposal :
All materials should be packaged, labeled, transported according to the local solid waste disposal regulation.

14. TRANSPORTATION INFORMATION

- Department of transportation classification
 - FLAMMABLE LIQUID
 - FLAMMABLE SOLID
 - FLAMMABLE GAS
 - COMBUSTIBLE LIQUID
 - OTHER SPECIFY BELOW
 - POISON, CLASS A
 - POISON, CLASS B
 - OXIDIZING MATERIAL
 - CORROSIVE MATERIAL
 - IRRITATING MATERIAL
 - NON FLAMMABLE GAS
 - NOT HAZARDOUS BY D.O.T REGULATIONS

- D.O.T. Proper shipping name : N. A

15. REGULATORY INFORMATION

This material and / or its components are listed under the TSCA

16. OTHER INFORMATION

The information contained herein is provided for the purpose of disclosing product hazards and does not constitute product specifications.
All warranties, either expressed or implied, are hereby disclaimed.