Material Safety Data Sheet



1 CHEMICAL PRODUCT AND COMPANYIDENTIFICATION

Chemical/Product Name ODA-BOZ (JBZ-OP100)

Company Name Shanghai Liluo Industrial Co., Ltd.

Address Rm.5110,N0.735,Liyang Rd.,Shanghai 200080,China

 Telephone number
 +86-21-56973112

 Fax number
 +86-21-56721121

 Emergency phone number
 +86-21-63335570

General Use Starting material for functional polymer,

Organic intermediate, etc.

2 HAZARDOUS IDENTIFICATION

GHS Classification (According to JIS 7252:2009)

Physical HazardsNot classifiedHealth HazardNot classifiedEnvironmental HazardNot classified

GHS Label Elements

Pictogram Not applicable
Signal word Not applicable
Hazard statements Not applicable.

Precautionary statement

[Prevention]Not applicable[Response]Not applicable[Storage]Not applicable

[Disposal]

• Dispose of contents/container in accordance with local/regional regulations.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Discrimination of substance or mixture

Substance

Common chemical name

2H-1,3-Benzoxazine3,3'-(oxydi-4,1-phenylene)bis[3,4-dihydro-,homopolymer]

Concentration/concentration range

100%

Chemical formula

(C28H24N2O3) x

Molecular weight

436

CAS Number

918788-89-3

EINECS Number

TSCA

Impurities and ingredients contributing

No information

to classification

4 FIRST-AID MEASURES

If inhaled

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- If not breathing, give artificial respiration.
- If breathing is difficult, give oxygen.
- If symptoms are present, get medical attention..

If on skin

- Remove immediately all contaminated clothing and shoes.
- Immediately wash skin with plenty of soap and water.
- If skin irritation or rash occurs, get medical advice/attention.
- Wash contaminated clothing before reuse.

If in eye

- Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lid.
- Remove contact lenses, if present and easy to do. Continue rinsing.
- If irritation persists, get medical advice/attention.

If swallowed

- After induce vomit with giving plenty of water or common salt water, get medical attention.
- Do not give anything from mouth to an unconscious person.

Expected acute and delayed effects

No information.

Most serious symptoms and effects

No information.

Protection of first-aiders

When take first-aid measures, attention not to contact on skin or in eyes.

5 FIRE-FIGHTING MEASURES

Extinguish agents

Water spray, carbon dioxide, dry chemical powder or appropriate foam.

Special hazardous information

May produce toxic fumes by fire.

Special fire-fighting procedures

- Move container and place it in a safe area if it is not dangerous. If it is not possible, keep cool by spraying water around the container.
- Continue cooling containers with plenty of water after extinction.

Protection of fire-fighters

- Wear appropriate respiratory devise and protective clothing for chemicals, avoid contacting with skin or eyes.
- Off-limits around the fire except responsible persons.

6 ACCIDENTAL RELEASE MEASURES

Human health precaution

- Immediately separate the released area against all directions and an appropriate distance.
- Off-limits around the released area by stretching a rope.
- Wear appropriate protective equipments (See 8 EXPOSURE CONTROLS/PERSONAL PROTECTION) and avoid contacting on skin or eye, or inhalation of gases.
- Evacuate persons in leeward. Stay in the windward.
- Do not touch or step on spilled material.
- No smoking and avoid sparks or flame.

Environmental precautions

• Attention releasing products into rivers so as to avoid any effects may occur to the environment.

Recovery and neutralisation

Sweep up spills immediately, then place into a chemical waste container which can be locked up.

Methods for cleaning up, devices

• Stop leakage if it is not dangerous, avoid raising dust.

Prevention of secondary hazards

- Avoid penetration in the sewer system (drains), basement or closed rooms.
- Clean up and ventilate the contaminated area afer correcting the released material.

7 HANDLING AND STORAGE

Handling

Technical measures

 Take facilitation measures described in "8 EXPOSURE CONTROLS/PERSONAL PROTECTION" and wear protective equipments.

Local/general ventilation

 Take local or overall ventilation described in "8 EXPOSURE CONTROLS/PERSONAL PROTECTION".

Precautions for safe handling

- Avoid contacting on skin, eyes or clothing.
- Avoid ingestion and inhalation.
- Wash hands thoroughly after handling.
- Remove contaminated clothing and wash before reuse.
- Keep container tightly closed.
- Install a local ventilation system.

Contact evasion

No information

Storage

Technical measures

No information.

Incompatible products

• See "10 STABILITY AND REACTIVITY".

Storage condition

- Store keeping away from flame, heat, ignition source.
- Store in a cool and well ventilated place.

Packaging materials

No information.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Administrative control level

Not specified

Occupational exposure limit

The Society for Occupational Health (2008): in case of dusts (as a class 3 dusts)

Respirable dust: 2 mg/m3

Total dust: 8 mg/m3

Engineering measures

- Install eye washer and safety shower near handling and storage area.
- Handle with a closed equipment or device.
- Install local ventilation for indoor use.

Personal protective equipment

Respiratory protection

• Use protective respiratory equipment.

Hand protection

• Use appropriate protective gloves. Use of chemical-resistant gloves is recommended.

Eye protection

Use appropriate protective eyeglasses or chemical safety goggles.

Skin and body protection

Wear appropriate protective clothing.

Hygiene measures

- Do not eat, drink or smoke when using this product.
- Wash hands well with soap after handling.

9 PHYSICALAND CHEMICAL PROPERTIES

Physical state (appearance, etc) Yellow Solid Melting/freezing point 60-65 °C 1)

Density 1.2g/cm3 (25 $^{\circ}$ C) ¹⁾ **Solubility** in water: insoluble ¹⁾

Others: others: soluble in hot aceton, toluene. 1)

Other information Not available

10 STABILITY AND REACTIVITY

Stability

Stable under normal handling condition.

Possible hazardous reactions

May cause an explosion if dusts produce.

Conditions to avoid

• Avoid mixing with incompatible material, strong oxidants.

Incompatible compounds

Strong oxidizing agents.

Hazardous decomposition products

Combustion will produce CO2 and probably CO.

11 TOXICOLOGICAL INFORMATION

Skin corrosion/irritationMay cause skin irritation. **Serious eye damage/eye irritation**May cause eye irritation.

Specific target organ toxicity - single exposure

If swallowed, it may cause gastrointestinal irritation with nausea, vomiting and diarrhea. If inhaled, it may cause respiratory tract irritation.

Other toxicological information No information

12 ECOLOGICAL INFORMATION Not available.

13 DISPOSAL CONSIDERATIONS

Waste from residues

- Follow related regulations and standards of local authorities when disposing.
- Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
- Do not dump this material into sewers, on the ground or into any body of water.

Contaminated packaging

- Recycle containers after cleaning or dispose appropriately in accordance with laws and local regulations.
- Remove completely remaining products from a container before disposal.

14 TRANSPORT INFORMATION

International regulations

UN number No applicable number

Name and descriptionNot applicableClass or divisionNot applicableUN packing groupNot applicable

National regulations in Japan

Ground transportNot applicableMarine transportNot applicableAir transportNot applicable

Precautionary transport measures and conditions

- When transporting, avoid direct sunlight, damage to containers, corrosion, leakage, and secure safe loading and avoid dropping off.
- Avoid putting heavy product on the upper side.

15 REGULATORY INFORMATION (Japan) Not regulated

(Please refer to national regulations in your country/region)

16 OTHER INFORMATION

References

1) JFE Chemical Corporation measured

[Note] This MSDS has been prepared based on the available product and hazard information. Please note that the contents may not cover all the possible situations/conditions. Descriptions in this MSDS are subject to be updated when new information becomes available. Precautions only cover normal handling conditions and need to modify/adapt safety measures to meet the special use or handling conditions.