



Material safety data sheet

1. Product and company identification

Product name : Rhodamine B
 Name of manufacturer : Junsei Chemical Co., Ltd.
 Address : 4-16, 4-Chome, Nihonbashi-Honcho, Chuo-ku Tokyo, 103-0023, JAPAN
 Name of section : Quality Assurance Department
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2. Summary of danger and Hazard

GHS classification

Physical and chemical hazard

Flammable solids : Out of category
 Pyrophoric solids : Out of category

Human health hazard

Acute toxicity(oral) : Category 4
 Serious eye damage · Eye irritation : Category 2A
 Carcinogenicity : Out of category
 Specific target organ systemic toxicity(single exposure) : Category 3 (respiratory tract irritation)

Pictogram or symbol



Signal word : Warning
 Hazard statement : Harmful if swallowed
 Causes serious eye irritation
 May cause respiratory irritation

Cautions

Safety measurements : Avoid breathing dust, mist, and vapor.
 Use only in a well-ventilated area.
 Do not eat, drink or smoke when using this product.
 Wear appropriate protective gloves, glasses, clothing, face shield, or mask.
 Wash hands thoroughly after handling.

First-aid measures : If inhaled : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical treatment if you feel unwell.

If swallowed: Rinse mouth. Get medical treatment if you feel unwell.

If in eyes : Rinse cautiously with water for several minutes. Get medical treatment.

If on skin : Remove contaminated clothing and the substance. Get medical treatment, if you feel unwell.

Wash hands thoroughly after handling.

Storage : Tightly container closed and store in a well-ventilated area.
Store locked up.

Disposal : Dispose of contents and containers appropriately in accordance with related regulations.

3. Composition/Information on ingredients

Substance/Mixture : Substance

Chemical name or commercial name

: 9-(2-Carboxyphenyl)-3,6-bis(diethylamino)xanthylium chloride

Ingredients and composition

: Rhodamine B min. 98%

Chemical formula : C₂₈H₃₁ClN₂O₃

CAS No. : 81-88-9

TSCA Inventory : Registered

EINECS No. : 2013839

4. First aid measures

Inhalation : Remove the victim to fresh air, and make him blow his nose and gargle.

Skin contact : Wash the affected areas under running water.

Eye contact : Wash the affected areas under running water.

Ingestion : Give the victim water or salt water and induce vomiting. If necessary, get medical attention.

5. Fire fighting measures

Extinguishing media : Water, dry chemical powder, carbon dioxide, dry sand, foam

Prohibited extinguishing media

: None

Particular fire fighting : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.

Protection for firefighters

: Firefighters should wear protective equipment.

6. Accidental release measures

Cautions for personnel : Wear proper equipment and avoid contact with skin and inhalation of dust. Keep away personnel except for authorized ones from spillage area by stretching ropes.

Cautions for environment : Attention should be given not to cause damage to the environment by flowing of spillage to rivers. In case of the dilution of copious water, do not cause damage to the environment by untreated wastewater.

Removal measure : Sweep up in a chemical waste container. Flush residual area with copious amounts of water.

7. Cautions of handling and storage

Handling

Engineering measures : If necessary, wear proper protective equipment not to contact with skin or inhale the dust.

Cautions for safety handling

: Handle the chemical not to generate aerosol or dust.

Storage

Adequate storage condition

: Store in a dark, cool place and tightly closed.

Safety adequate container materials

: Glass, polyethylene, polypropylene

8. Exposure control/Personal protection

Engineering measures : Use only with adequate ventilation and in closed systems.

Control parameters

AGGIH(2009) : Not established

Protective equipment

Respiration protective equipment

: If necessary, wear dust mask

Hands protective equipment

: Impervious protective gloves

Eyes protective equipment

: Safety goggles

9. Physical and chemical properties

Appearance : Crystalline powder

Color : Dark green-dark reddish green

Odor : Odorless

Boiling point : Decomposition

Melting point : Decomposition(210-211°C)

Specific gravity : Not available

Solubility

Solubility in solvents : Water : Readily soluble

Organic solvents : Soluble in ethanol

Other data : Practically insoluble in acids or alkaline solution

10. Stability and reactivity

Stability : Stable under normal usage.

Reactivity : May react with strong oxidizing substances.

Incompatible conditions : Light, heat

Incompatible materials : Oxidizing substances

Hazardous decomposition products

: Carbon monoxide, nitrogen oxides, chlorine, hydrogen chloride

11. Toxicological information

- Acute toxicity : Harmful if swallowed(category 4)
Dermal : Not possible to classify because of insufficient data.
Inhalation(vapor) : Not possible to classify because of insufficient data.
Inhalation(dust, mist) : Not possible to classify because of insufficient data.
mouse oral LD50=887mg/kg
- Skin corrosiveness : Not possible to classify because of insufficient data.
- Irritation to skin, eyes : Causes serious eye irritation(category 2A)
If contacted with eyes, eyes are irritated.
- Respiratory sensitization or Skin sensitization
: Respiratory sensitization : Not possible to classify because of insufficient data.
Skin sensitization : Not possible to classify because of insufficient data.
- Mutagenicity : Not possible to classify because of insufficient data.
- Carcinogenic effects : Out of category
IARC classifies group 3(not classifiable as to carcinogenicity in humans)
- Effects on the reproductive system
: Not possible to classify because of insufficient data.
- Specific target organ systemic toxicity single exposure
: May cause respiratory irritation(category 3)
If inhaled the dust, cause cough, throat pain, chest ache.
- Specific target organ systemic toxicity repeated exposure
: Not possible to classify because of insufficient data.
- Aspiration hazard : Not possible to classify because of insufficient data.

12. Ecological information

- Ecotoxicity
- Fish toxicity : Acute aquatic toxicity : Not possible to classify because of insufficient data.
Chronic aquatic toxicity : Not possible to classify because of insufficient data.
- Rediualbility and degradability
: Not available
- Ecorediualbility : Not available

13. Disposal consideration

- Residual disposal : Mixed with flammable organic solvents and burn in a chemical incinerator equipped with an afterburner and a scrubber. Or entrust approved waste disposal companies with the disposal.
- Containers : In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

14. Transport information

UN class : Not applicable

15. Regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

References

Dictionary of Organic Compounds, The society of Synthetic Organic Chemistry, Kodansha Ltd. (1985)

Registry of Toxic Effects of Chemical Substances (RTECS) 1985-86 ed. National Instituted for Occupational Safety and Health(1987)

The information contained herein is based on several references and the present state of our knowledge. However the MSDS does not always cover all information about the product, handle the product carefully. The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements. The information herein is only provision of information, and it does not represent a guarantee the properties of the product.