



Material safety data sheet

1. Product and company identification

Product name : Wetting tension test mixture 70.0mN/m
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
Telephone number : +81-48-986-6161
Facsimile number : +81-48-989-2787
Mail address : shiyaku-t@junsei.co.jp

2. Summary of danger and Hazard

GHS classification

Physical and chemical hazard

Flammable liquids : Out of category

Pyrophoric liquids : Out of category

Human health hazard

Acute toxicity(oral) : Out of category

Acute toxicity(dermal)

: Out of category

Acute toxicity(inhalation:dust, mists)

: Out of category

Skin corrosion • Irritation

: Category 3

Serious eye damage • Eye irritation

: Category 2B

Germ cell mutagenicity

: Out of category

Reproductive toxicity

: Out of category

Environmental hazard

Hazardous to the aquatic environment-acute hazard

: Out of category

Hazardous to the aquatic environment-chronic hazard

: Out of category

Signal word : Warning

Hazard statement : Causes mild skin irritation

Causes eye irritation

Cautions

First-aid measures : If in eyes : Rinse cautiously with water for several minutes. Get medical treatment.
If on skin : Remove contaminated clothing and the substance. If skin irritation occurs, get medical treatment.
Wash hands thoroughly after handling.

3. Composition/Information on ingredients

Substance/Mixture : Mixture
Chemical name or commercial name : Formamide, victoria pure blue B0
Ingredients and composition : The mixture of 10.0v/v% formamide and 90.0v/v% water solution contains about 0.03% victoria pure blue B0 as a coloring agent.
Chemical formula : Formamide HCONH2
Victoria pure blue B0 C33H40ClN3
CAS No. : Formamide 75-12-7
Victoria pure blue B0 2390-60-5
Dangerous and hazardous ingredients : Formamide

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 for at least 15 minutes. If necessary, get medical treatment.
Ingestion : Give the victim water or salt water and make him vomit. Get medical attention.
Protection for first aid person : Savers wear proper protective equipment like rubber gloves, goggles.

5. Fire fighting measures

Extinguishing media : Water, dry chemical powder, carbon dioxide, dry sand
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.
Dry chemical powder, carbon dioxide or dry sand should be used for small fires. Foam extinguisher is effective for a large scale fire.
Protection for firefighters : Wear breathing apparatus.

6. Accidental release measures

Cautions for personnel : Wear proper protective equipment and avoid contact with skin and inhalation of vapor. Keep away personnel and perform the operation at upwind area. Shut off all sources of ignition.

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 : Absorb spill with paper or cloth.

Prevention of second accident
: Remove nearby sources of ignition and prepare extinguishing media.

7. Cautions of handling and storage

Handling

Engineering measures : Wear proper equipment not to contact with skin or inhale the vapor.
Fire is strictly prohibited.
Ventilate well at working places.

Cautions for safety handling

: Use with an enclosed system or a local exhaust ventilation.

Cautions : Do not contact with oxidizing substances.

Storage

Adequate storage condition

: Store the bottle tightly closed in a cool, dark place because the substance has hygroscopic property.

Safety adequate container materials

: Glass, fluorine resin

Do not use polyvinyl chloride resin, polystyrene.

8. Exposure control/Personal protection

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

Control parameters

ACGIH(2009) : 10ppm(as Formamide) (TLV-TWA)

Protective equipment

Respiration protective equipment

: If necessary, wear chemical cartridge respirator with an organic vapor cartage

Hands protective equipment

: Impervious protective gloves

Eyes protective equipment

: Safety goggles

9. Physical and chemical properties

Appearance : Liquid

Color : Blue

Odor : Odorless

Boiling point : Not available

Melting point : Not available

Flash point : Not available

Explosion characteristics

Explosion limit : upper : Not available lower : Not available

Vapor pressure : 0.13hPa(20°C)

Vapor density : 1.6
Specific gravity : 1.04g/ml (20°C)
Solubility
Solubility in solvents : Water ; Freely soluble
Organic solvents : Freely soluble in ethanol, acetone.
Other data : Wetting tension : 65.0mN/m(23°C)

10. Stability and reactivity

Stability : Stable under normal usage.
Reactivity : May form hydrogen cyanide gas by dehydrated agents.
Incompatible conditions : Light, heat
Incompatible materials : Oxidizing substances
Hazardous decomposition products
: Carbon monoxide, nitrogen oxides

11. Toxicological information

Acute toxicity : Oral : Out of category
Dermal : Out of category
Inhalation(vapor) : Not possible to classify because of insufficient data.
Inhalation(dust, mist) : Not possible to classify because of insufficient data.
rat oral LD50=6000mg/kg
mouse oral LD50=3150mg/kg
rabbit skin LD50=6000mg/kg
Skin corrosiveness : Causes mild skin irritation(category 3)
From description that slight transient skin irritations was admitted in the test using the guinea-pig.
Irritation to skin, eyes : Causes eye irritation(category 2B)
Based on the description that the very slight transient stimulant action was acknowledged in the test applied to the eyes of the rabbits
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.
Skin sensitization : No skin sensitization by maximization test with guinea pig. However, classification is not possible in the absence of data on the severity of the effects.
Mutagenicity : Out of category
Since there was a negative result with the micronucleus test on mice red corpuscles which is a in vivo mutagenicity test using somatic cells.
Carcinogenic effects : Not possible to classify because of insufficient data
Effects on the reproductive system
: Out of category

In the oral administration study using pregnancy rats and rabbits, there is a description that specific reproductive toxicity was not observed at the dose in which general toxicity is observed in parental animals.

Specific target organ systemic toxicity single exposure

: Not possible to classify because of insufficient data.

There was a description referring to that toxic phenomena were not confirmed at high concentrations beyond the guidance value limits of Category 2 in mist inhalation exposure tests using rats, while there is no other data, and determined that it cannot be classified as out of Category because of lack of data.

Specific target organ systemic toxicity repeated exposure

: Not possible to classify because of insufficient data.

Although there was description that toxic effect was not observed with the dosage within the guidance value range for Category 2 in 90 day dermal administration test on rats, since there was no other data which clearly deny hazard with Priority 1, it was presupposed that data is insufficient and it cannot be classified as out of Category.

Aspiration hazard

: Not possible to classify because of insufficient data.

12. Ecological information

Ecotoxicity

Fish toxicity

: Acute aquatic toxicity : Out of category

Chronic aquatic toxicity : Out of category

Red killifish LC50>100mg/l/96H

Rediability and degradability

: High biodegradability

Ecorediability

: Not available

13. Disposal consideration

Residual disposal

: 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)

Solvents Handbook, T. Asahara et al, Kodansha Scientific Ltd. (1976)

Dangerous Properties of Industrial Materials, 6th ed. N. I. Sax Van Nostrand Reinhold Company (1984)

Handbook of 15710 Chemical Products, The Chemical Daily Co. (2010)

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 handling, conduct appropriate safety measurements. The information herein is only provision of information, and it does not represent a guarantee the properties of the product.