

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING**

Product Name : JOY BLUE LHF-31F
Product Description : Blue liquid and slight odor
Use of the Substance/Preparation : For industrial use only
Supplier : Mikuni Color Ltd.
138-1 Kokubunji, Mikunino-Cho, Himeji, Japan
Emergency Telephone No. : +(81)-792-52-0783

2. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a preparation. (Water-based pigment dispersion.)

Hazardous Component(s)

Component(s)	CAS No.	%(W/W)
Ethylene glycol	107-21-1	5-10
Polyethylene glycol	25322-68-3	5-10
Aqueous ammonia	1336-21-6	<1
1,2-benzisothiazolin-3-one	2634-33-5	<0.1

3. HAZARDOUS IDENTIFICATION

Main Hazard(s) : Hazardous in case of eye contact, of skin contact, of ingestion, of inhalation.
Vapor of ethylene glycol may cause central nerve system depression resulting in dizziness and unconsciousness.

4. FIRST AID MEASURES

Inhalation : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.
Ingestion : Induce vomiting immediately by medical personnel. Never give anything by mouth to an unconscious person. Obtain medical attention immediately.
Skin Contact : Remove contaminated clothing. Wash skin with plenty of soap and water for at least 15 minutes. If symptoms develop, obtain medical attention.
Eye Contact : Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Specific Hazards : Containers may explode when involved in a fire.
Extinguishing Media : Dry chemical, foam or carbon dioxide may be used.
Unsuitable Extinguishing media : Not available

Protective Equipment for Firefighters : Wear full protective clothing and self-contained breathing apparatus complying with an approved standard with full facepiece operated in the pressure demand or other positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Observe all relevant local and international regulations.

Personal Protection : Avoid contact with spilled or released material. Ensure suitable personal protection (including respiratory protection) during removal of spillages.

Cleaning up Methods : Remove all sources of ignition. Use non-sparking tools and equipment. Avoid release to the environment. Absorb spillage with an inert material, then place in a chemical waste container for later safe disposal. Earth may be shovelled to contain spillage and to avoid contamination of sewers and watercourses.

7. HANDLING AND STORING

Handling : Avoid contact with eyes, skin and clothing. Keep container closed. Only use in well ventilated areas. Wash thoroughly after handling. Handling temperature: Below 30 and above 0 .

Storing : Keep container tightly closed until ready for use. Store in a cool, dry, well-ventilated place away from acids, and oxidizing materials. Storing temperature: Below 30 and above 0 .

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures : Provide adequate ventilation. Local exhaust ventilation is recommended.

Respiratory Protection : If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, respiratory equipment suitable for the specific conditions and meeting relevant legislation must be worn.

Hand Protection : Chemical resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products.

Eye Protection : Safety eyewear complying with an approved standard should be used to avoid exposure to liquid splashes, mists, gases, or dust.

Protective Clothing : Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

Occupational Exposure Limits

Component(s)	CAS No.	Type	Value	Source
Ethylene glycol	107-21-1	STEL	100mg/m ³ (aerosol)(ceiling)	ACGIH TLV

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid
Color	: Blue
Odor	: Slight odor
Boiling point	: Not available
Melting point	: Not available
Flash point	: Not applicable
Explosion limits	: Not available
Vapor pressure	: Not available
Water solubility	: Miscible at any rate
Auto-ignition temperature	: Not applicable

10. STABILITY AND REACTIVITY

Stability	: Stable at room temperature in closed containers under normal storage and handling conditions.
Conditions to Avoid	: Heat, flames, ignition sources, and incompatibles.
Materials to Avoid	: Strong acids, bases, strong oxidizing agents.
Hazardous Decomposition Products	: Carbon dioxide and carbon monoxide may form when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	: LD50: 4,700mg/kg, Rat (as Ethylene glycol) Ingestion may cause central nervous system depression, vomiting, headaches, lowered blood pressure, stupor, collapse, and unconsciousness with convulsions.
Acute Inhalation Toxicity	: Vapor inhalation may cause nausea, vomiting, dizziness, drowsiness, pulmonary edema, and central nervous system depression.
Acute Dermal Toxicity	: LD50: 9,530mg/kg, Rabbit (as Ethylene glycol) Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.
Skin Irritation	: May cause skin irritation. It can be absorbed through skin.
Eye Irritation	: May cause eye irritation.
Respiratory Irritation	: May cause respiratory irritation.
Sensitisation	: Not available
Mutagenicity	: Not available
Carcinogenicity	: Not available

12. ECOLOGICAL INFORMATION

Further Information	: There is no data available for this product.
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13. DISPOSAL CONSIDERATIONS

Product	: Do not dump this material into sewers, on the ground or into any body of water. Comply with all relevant regulations. Contact an accredited disposal contractor for the special advice.
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14. TRANSPORT INFORMATION**Sea Transport**

IMDG

UN-No : Not applicable

Class : Not applicable

15. REGULATORY INFORMATION

Please refer to any other national measures that may be relevant.

16. OTHER INFORMATION

Uses and Restrictions : Use only in industrial manufacturing processes.

Disclaimer : The information in this document is based on our current knowledge and is intended to describe the product for the purposes of health, safety, and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.