Issue date 2024-01-24

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Bufalin Product No. 30

Supplier Name IWASHIMA YAKUHIN Co., Ltd.

Address 4-201, Sakurazaka, Moriyama-ku, Nagoya City, Aichi Prefecture 463-0018, Japan

Tel +81-52-715-5601 Fax +81-52-715-5602

Email address info@iwashimayakuhin.co.jp

Recommended uses and restric For research use only, do not use for human or animals.

2. Hazards identification

GHS classification

Health hazards Acute toxicity - Oral Category 2

Acute toxicity (Dermal) Category 2
Acute toxicity - Inhalation Category 1

(Dusts/Mists) Pictograms



Signal word Danger

Hazard statements Fatal if swallowed, in contact with skin, and inhaled.

Precautionary statements

Prevention Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Do not breathe dust.

Use only outdoors or in a well-ventilated area.

In case of inadequate ventilation, wear respiratory protection. Do not get in eyes, on skin, or on clothing. Wear protective

gloves/protective clothing.

Response If exposed or concerned: Get emergency medical help

immediately. Rinse mouth.

IF ON SKIN: Wash with plenty of water. If symptoms persist, call

a physician.

Take off contaminated clothing and wash it before reuse. Store in a well-ventilated place. Store in a closed container.

Store locked up.

Disposal Dispose of contents/container in accordance with

local/regional/national/international regulations.

Other hazards Not available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance
Chemical Name Bufalin

Storage

Concentration or concentration range 99.0% Formula (Molecular weight) C24H34O4 (386.52)

CAS RN 465-21-4

Notice Through Official –

Gazettes Reference Number

(ENCS)

Notice Through Official –

Gazettes Reference Number

(ISHL)

PRTR

Impurities and/or Additives Not applicable

4. FIRST AID MEASURES

Skin contact

Get emergency medical help immediately. Inhalation

Remove person to fresh air and keep comfortable for

Get emergency medical help immediately. Wash with plenty of

Eye contact Rinse cautiously with water for at least 15 minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. If

symptoms persist, call a physician.

Ingestion Get emergency medical help immediately. Rinse mouth.

Most important symptons/effects, acute and delayed

Protection of first-aiders Special notes for physicians Not available.

Not available. Not available.

5. FIRE FIGHTING MEASURES

Unsuitable extinguishing media

Water spray (fog), Foam, Extinguishing powder, Carbon Suitable extinguishing media

dioxide (CO2) No information

Specific hazards arising from the chemical product

In the event of a fire, highly toxic decomposed products may

be generated. No information

Special extinguishing method Special protective actions for fire-fighters

Wear self-contained breathing apparatus, protective gloves and

eye protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency

procedures

Storage

Keep unnecessary personnel away.

Ensure adequate ventilation. Wear protect clothes while the

work. Avoid release to the environment.

Environmental precautions

Methods and materials for contaminent and cleaning up

Collect spillage appropriately to prevent it from scattering.

For waste disposal, see section 13 of the SDS.

Clean contaminated objects and areas thoroughly to remove Secondary disaster prevention measures

residual contamination.

7. HANDLING AND STORAGE

Technical measures Handling See section 8 of the SDS, perform engineering controls and

wear protective equipment.

Do not rough handling containers. Avoid contact and inhalation Safety handling precautions

of dust. Wear protective equipment.

Seal the container after use. After handling, wash hands. See section 10 of the SDS.

Hygiene measures Safe storage conditions

Contact avoidance

After handling, wash hands. Do not take food, drink and smoking while handling.

Store in a cool, dark place. Protect from sunlight.

Store locked up.

Safe storage conditions Glass.Keep container tightly closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Administrative Control Levels No set up.

Occupational Exposure Limits Japan Society for Occupational No set up. **ACGIH**

No set up.

Provide the safety shower facility, and hand and eye-wash Engineering controls

facility.

Use a local exhaust system Personal protective equipment Respiratory protection Dust mask

Hand protection Protection gloves
Eye/face protection Chemical safety goggles

Skin and body protection Lab Coat, long sleeve work clothes

Special note Protective equipment should be inspected periodically according to the protective inspection chart.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state

Other data

State Solid Colour White

Odor No data available Melting point/freezing point About230℃ Boiling point, initial boiling point and boiling range No data available No data available Flammability Upper/lower flammability or explosive limits No data available Flash point No data available Auto-ignition temperature No data available Decomposition temperature No data available No data available рΗ No data available Kinematic viscosity Solubilities No data available n-Octanol/water partition coefficient:(log Pow) No data available No data available Vapour pressure Specific Gravity / Relative density No data available Vapour density No data available Particle characteristics No data available

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical stability Decompose by heat and light.

Hazardous reactions No data available

Conditions to avoid High temperature and direct sunlight.

Incompatible materials

No data available
Hazardous decomposition products

No data available

1 1. TOXICOLOGICAL INFORMATION

Acute toxicity - Oral No data available Acute toxicity (Dermal) No data available Acute toxicity (Inhalation: gas) No data available Acute toxicity (Inhalation : vapours) No data available Acute toxicity - Inhalation (Dusts/Mists) No data available Skin irritation/corrosion No data available Serious eye damage/ irritation No data available Respiratory sensitization No data available Skin sensitization No data available Reproductive cell mutagenicity No data available Carcinogenicity No data available Reproductive toxicity No data available Reproductive toxicity, effects on or via lactation No data available STOT-single exposure No data available STOT-repeated exposure No data available Aspiration hazard No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity Hazardous to the aquatic

environment, acute hazard

No data available

No data available

Hazardous to the aquatic

environment, long-term

hazard

Persistence and degradability Bioaccumulative potential Mobility in soil

Hazard to the ozone layer

No data available No data available No data available No data available

No data available

13. DISPOSAL CONSIDERATIONS

Waste from residues

Dispose of contents/container in accordance with local/regional/national/international

regulations.

Contaminated container and

Dispose of contents/container in accordance with local/regional/national/international

contaminated packaging regulations.

14. TRANSPORT INFORMATION

International restriction

UN Number UN3462

Proper shipping name Toxins, extracted from living sources, solid,

n.o.s. (Bufalin)

UN classfication (Transport hazard class) 6.1
Subsidiary hazard class –
Packing group II

Marine pollutant Not applicable

Domestic restriction

Marine Toxic Substances - Poison
Aviation Toxic Substances - Poison

Rail and road Not applicable

15. REGULATORY INFORMATION

Industrial Safety and Health Act Not applicable Pollutant Release and Transfer Register Law Not applicable Poisonous and Deleterious Substances Control Law Not applicable Labor Standards Act Not applicable Act on the Regulation of Manufacture and Evaluation of Chemical Substances Not applicable Fire Service Act Not applicable Air Pollution Control Act Not applicable Water Pollution Prevention Act Not applicable Not applicable Water Supply Service Act Not applicable Sewerage Act Act on Prevention of Marine Pollution and Maritime Disaster Not applicable Act on Waste Management and Public Cleaning Not applicable

1 6. OTHER INFORMATION

Key literature references and sources for data etc.

NITE: National Institute of Technology and Evaluation (JAPAN): Nite Chemical Risk Information

Platform

Ministry of Health, Labour and Welfare: GHS model SDS information

Japanese Pharmacopoeia

Inagaki I(1972)[Phytochemistry] Shokubutukagaku (in Japanese) 4th edition.Ishiyaku

Publishers, Inc.

National Institutes of Health: PubChem

ECHA: Opinion of the Committee for Risk Assessment (RAC) in EU

This SDS is according to JIS Z 7253: 2019.

This information in this Safety Data Sheet is designed only as a guidance for handling, and is not to be considered a waranty or quality specification of this product. The information provided is correct to the best of our knowledge, information and belief at the data of its publication and so on. However, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity.