Issue date 2023-04-21

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Berberine chloride hydrate

Product No. 35

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 Not applicable

Pictograms None

Signal word Not applicable Hazard statements Not applicable

Precautionary statements

Prevention Not applicable
Response Not applicable
Storage Not applicable
Disposal Not applicable
Other hazards Not available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Chemical Name Berberine chloride hydrate

Concentration or concentration range 99.00%

Formula (Molecular weight) C20H18ClNO4·xH2O (as Anhydride : 371.81)

CAS RN 141433-60-5

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

Inhalation Remove person to fresh air and keep comfortable for

breathing.

Not available.

Skin contact Wash with plenty of water.If symptoms persist, call a physician.

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 Rinse mouth.Get medical advice/attention if you feel unwell.

Most important symptons/effects, acute and delayed

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

5. FIRE FIGHTING MEASURES

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

dioxide (CO2)

Unsuitable extinguishing media Not available.

Specific hazards arising from the chemical product

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

be generated. Not available.

Special protective actions for fire-fighters Wear self-contained breathing apparatus , protective gloves and

eye protection.

6. ACCIDENTAL RELEASE MEASURES

Special extinguishing method

Personal precautions, protective equipment and emergency

procedures

Keep unnecessary personnel away. Ensure adequate ventilation. Wear protect clothes while the

work.

Environmental precautions Avoid release to the environment.

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.

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly to remove

residual contamination.

7. HANDLING AND STORAGE

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

wear protective equipment.

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

of dust.

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

Contact avoidance See section 10 of the SDS. Hygiene measures After handling, wash hands.

Do not take food, drink and smoking while handling. Store in a cool, dark place. Protect from sunlight.

Storage Safe storage conditions

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.

Health

ACGIH

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

facility.

No set up.

Dust mask

Use a local exhaust system

Personal protective equipment Respiratory protection

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

Engineering controls

State Solid Colour Yellow

Odor odorless or faint, characteristic odor

Melting point/freezing point

About201℃ (with decomposition)

Boiling point, initial boiling point and boiling range

No data available

Boiling point, initial boiling point and boiling range

Flammability

Upper/lower flammability or explosive limits

No data available

Flash point

No data available

Auto-ignition temperature

Decomposition temperature

PH

No data available

No data available

No data available

No data available

Kinematic viscosity

No data available

Solubilities sparingly soluble in methanol, slightly soluble in ethanol (95),

and very slightly soluble in water.

n-Octanol/water partition coefficient:(log Pow)

Vapour pressure

Specific Gravity / Relative density

Vapour density

Particle characteristics

No data available

1 0. 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 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 STOT-repeated exposure No data available No data available Aspiration hazard

12. ECOLOGICAL INFORMATION

Ecotoxicity Hazardous to the aquatic No data available

environment, acute hazard

Hazardous to the aquatic

No data available

environment, long-term

Persistence and degradability

Bioaccumulative potential

Mobility in soil

Hazard to the ozone layer

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 Not regulated

UN Number

Proper shipping name

UN classfication (Transport hazard class)

Subsidiary hazard class

Packing group

Marine pollutant Not applicable

Domestic restriction

Marine Not applicable
Aviation Not applicable
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 Water Supply Service Act Not applicable Sewerage Act Not applicable Act on Prevention of Marine Pollution and Maritime Disaster Not applicable Act on Waste Management and Public Cleaning Not applicable

16. 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.