

Safety Data Sheets

1. Identification

Product name : Reinecke salt monohydrate

Name of supplier : JUNSEI CHEMICAL CO., LTD.

Address : 1-6, Ohmano-Cho, Koshigaya, Saitama 343-0844, Japan

Division : Quality Assurance Department

Phone : +81-48-986-6161

FAX : +81-48-989-2787

E-mail : shiyaku-t@junsei.co.jp

Product code (SDS NO) : 81020jis_E-1

2. Hazards identification

GHS classification and label elements of the product

GHS classification

(Note) GHS classification without description : Not applicable/Out of classification/Not classifiable

3. Composition/information on ingredients

Substance/Preparation : Substance

Common name, synonyms : Ammonium reineckate monohydrate

Ingredient name : Reinecke salt monohydrate

content(%) : -

Chemical formula : $C_4H_{10}CrN_7S_4 \cdot H_2O$

CAS No. : 13573-17-6 [13573-16-5(anh)]

MW : 354.42

ECNO : 237-003-3(anh)

4. First-aid measures

IF INHALED

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES :

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth.

Call a POISON CENTER or doctor/physician if you feel unwell.

5. Fire-fighting measures

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Specific hazards arising from the chemical

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for fire-fighters

Wear fire/flame resistant/retardant clothing.

Wear cold insulating gloves/face shield/eye protection.

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area after material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Avoid release to the rivers, lakes, ocean, groundwater.

Methods and materials for neutralization, containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Protective measures against fire & explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Exhaust/ventilator

Exhaust/ventilator should be available.

Safety treatments

Avoid contact with skin.

Avoid contact with eyes.

Avoid breathing dust, vapor, mist, or gas.

Safety Measures/Incompatibility

Wear protective gloves, protective clothing or face protection.

Use personal protective equipment as required.

When using do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Recommendation for storage

Keep container tightly closed.

Keep cool. Protect from sunlight.

Store in well-ventilated place.

8. Exposure controls/personal protection

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Protective equipment

Respiratory protection

Wear positive pressure self-contained breathing apparatus (SCBA).

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

9. Physical and Chemical Properties**Physical properties**

Appearance :crystal or crystalline powder

Color :dark red-red

odour data N.A.

pH data N.A.

Phase change temperature

Initial Boiling Point/Boiling point data N.A.

Melting point/Freezing point :270°C

Decomposition temperature data N.A.

Flash point data N.A.

Auto-ignition temperature data N.A.

Explosions data N.A.

Vapor pressure data N.A.

Vapor density data N.A.

Specific gravity/Density data N.A.

Solubility

Solubility in water :Sparingly sol in cold water; sol in hot water.

n-Octanol /water partition coefficient data N.A.

10. Stability and Reactivity**Stability**

Stable under normal storage/handling conditions.

Conditions to avoid

Open flames. Heat.

Hazardous decomposition products

Carbon oxides, Sulfur oxides, Nitrogen oxides

11. Toxicological Information

Symptoms related to the physical, chemical and toxicological characteristics

No Acute toxicity data available

No Irritant properties data available

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Teratogenic effects data available

No Carcinogenic effects data available

No Toxicity for reproduction data available

No Delayed/chronic effects from short/long-term exposure data available

No Aspiration hazard data available

12. Ecological Information**Ecotoxicity**

No Aquatic toxicity data available

No Persistence and degradability data available

No Bioaccumulative potential data available

13. Disposal Considerations**Disposal methods**

Dispose of contents/container in accordance with local/national regulation.

14. Transport Information**UN No, UN CLASS**

Not applicable to UN NO.

15. Regulatory Information**US major regulations****TSCA**

Reinecke salt monohydrate

Other regulatory information

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

16. Other information**Reference Book**

Globally Harmonized System of classification and labelling of chemicals, (4th ed., 2011), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 18th edit., 2013 UN
Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)
2014 TLVs and BEIs. (ACGIH)
<http://monographs.iarc.fr/ENG/Classification/index.php>
Supplier's data/information
Chemical Risk Information Platform (CHRIP)(NITE) <http://www.safe.nite.go.jp/japan/db.html>
GHS Classification Guidance for Enterprises 2013 Revised Edition (August, 2013, METI)

Other information

This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It is advised to make their own tests to determine the safety and suitability of each such product or combination for their own purposes.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current EU official data