

Safety Data Sheets

1. Identification of the substance/mixture and of the company/undertaking

Product identifier :

Product name : Eriochrome black T methanolic solution (5g/L)

Product code(SDS NO) :96052jis_E-1

Details of the supplier of the safety data sheet

Manufacturer/Supplier :JUNSEI CHEMICAL CO., LTD.

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

Competent section :Quality Assurance Department

Telephone number :+81-48-986-6161

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2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

PHYSICAL HAZARDS

Flammable liquids : Category 2

HEALTH HAZARDS

Acute toxicity Oral : Category 4

Serious eye damage /eye irritation : Category 2

Reproductive toxicity : Category 1B

Specific target organ toxicity-single exposure : Category 1 (CNS; vision/organ of vision;
systemic toxicity)

Specific target organ toxicity – single exposure; Narcosis Category 3

Specific target organ toxicity-repeated exposure : Category 1 (CNS; vision/organ of vision)

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

Label elements



Signal word :Danger

HAZARD STATEMENT

Highly flammable liquid and Vapor

Harmful if swallowed

Causes serious eye irritation

May damage fertility or the unborn child

Causes damage to organs after single exposure

May cause drowsiness and dizziness

Causes damage to organs following repeated exposure

PRECAUTIONARY STATEMENT

Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

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

Keep container tightly closed.

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- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Wash contaminated parts thoroughly after handling.
- Wear protective gloves and face protection.
- Wear eye protection/face protection.
- Use personal protective equipment as required.
- Do not eat, drink or smoke when using this product.

Response

- In case of fire: Use appropriate media other than water for extinction.
- Get medical advice/attention if you feel unwell.
- IF exposed or concerned: Get medical advice/attention.
- Call a POISON CENTRE or doctor/physician if you feel unwell.
- IF exposed or concerned: Call a POISON CENTER or doctor/physician.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- 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.
- Rinse mouth.
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage

- Store locked up.
- Store in well-ventilated place. Keep container tightly closed.
- Store in well-ventilated place. Keep cool .

Disposal

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

Physical and Chemical hazards

- Highly flammable liquid. Vapor/air mixture may explode.

3. Composition/information on ingredients

Substance/Preparation :

Mixtures

Ingredient name:Eriochrome black T
content(%):0.5
Chemical formula:C20H12N3NaO7S
Chemicals No, Japan:5-2113
CAS No.:1787-61-7
MW:461.38
ECNO:217-250-3

Ingredient name:Hydroxylamine hydrochloride
content(%):0.5
Chemical formula:ClH4NO
Chemicals No, Japan:1-375
CAS No.:5470-11-1
MW:69.49
ECNO:226-798-2

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Ingredient name:Methanol
content(%):Balance
Chemical formula:CH4O
Chemicals No, Japan:2-201
CAS No.:67-56-1
MW:32.04
ECNO:200-659-6

4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical attention/advice if you feel unwell.
IF exposed or concerned: Get medical attention/advice.
Call a POISON CENTRE or doctor/physician if you feel unwell.
IF exposed or concerned: Call a POISON CENTER or doctor/physician.

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.
Induce vomiting (ONLY IN CONSCIOUS PERSONS!).

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

In case of fire, use water mist, foam, dry powder, CO2 .

Specific hazards arising from the substance or mixture

Containers may explode when heated.
Fire may produce irritating, corrosive and/or toxic gases.
Runoff from fire control or dilution water may cause pollution.

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.
Cool container with water spray.

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.

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Wear proper protective equipment.

Environmental precautions

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

Methods and materials for containment and cleaning up

Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire & explosion)

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

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing or face protection.

Wear protective gloves and face protection.

Wear eye protection/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 cool . Protect from sunlight.

Store locked up.

Store in well-ventilated place. Keep container tightly closed.

8. Exposure controls/personal protection

Control parameters

Adopted value

(Methanol)

ACGIH(2008) TWA: 200ppm

STEL: 250ppm (Headache; eye dam; dizziness; nausea)

Notation···Skin

OSHA-PEL

(Methanol)

TWA 200ppm, 260mg/m³

Exposure controls

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Appropriate engineering controls

- Do not use in areas without adequate ventilation.
- Eye wash station should be available.
- Washing facilities should be available.

Individual protection measures

Respiratory protection

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

Hand protection

- Wear protective gloves.

Eye protection

- Wear eye/face protection.

Safety and Health measures

- Wash ... thoroughly after handling.
- Do not eat, drink or smoke when using this product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

- Appearance :LIQUID
- Color :BLACK
- Odor :CHARACTERISTIC ODOUR
- pH data N.A.

Phase change temperature

- Initial Boiling Point/Boiling point :65°C(Methanol)
- Melting point/Freezing point :−98°C(Methanol)
- Decomposition temperature data N.A.
- Flash point :(C.C.) 12°C(Methanol)
- Auto-ignition temperature :464°C(Methanol)
- Explosive properties : Flammability or explosive limit
 - lower limit :5.5 vol %(Methanol)
 - upper limit :44 vol %(Methanol)
- Vapor pressure :12.3 kPa (20°C)(Methanol)
- Vapor density data N.A.
- Relative Vapor Density (Air=1) :1.1(Methanol)
- Relative density of the Vapor/air-mixture at 20°C (Air = 1) :1.01(Methanol)
- Specific gravity/Density data N.A.

Solubility

- Solubility in water :miscible
- n-Octanol /water partition coefficient data N.A.

10. Stability and Reactivity

Chemical stability

- Stable under normal storage/handling conditions.
- Highly flammable.

Possibility of hazardous reactions

- The vapour mixes well with air, explosive mixtures are easily formed.
- Reacts violently with oxidants. This generates fire and explosion hazard.

Conditions to avoid

- Contact with incompatible materials.
- Open flames. Heat.

Incompatible materials

- Strong oxidizing agents

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Hazardous decomposition products

Carbon oxides, Sulfur oxides, Nitrogen oxides, Chlorides.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]

(Hydroxylamine hydrochloride) rat LD50= 141 mg/kg (RTECS, 1997)

(Methanol) human LD50=1400 mg/kg (DFGOT vol.16, 2001)

Acute toxicity (Dermal)

[GHS Cat. Japan, base data]

(Methanol) rabbit LD50=15800mg/kg (DFGOT vol.16, 2001)

Acute toxicity (Inhalation)

[GHS Cat. Japan, base data]

(Methanol) vapor : rat LC50>31500 ppm/4hr (DFGOT vol.16, 2001)

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]

(Hydroxylamine hydrochloride) skin irritating (ICSC, 1997)

Serious eye damage /irritation

[GHS Cat. Japan, base data]

(Hydroxylamine hydrochloride) eye irritating (ICSC, 1997)

(Methanol) rabbit category 2 : Draize test (EHC 196, 1997)

Allergenic and sensitizing effects

Skin sensitization

[GHS Cat. Japan, base data]

(Hydroxylamine hydrochloride) cat.1; MAK list : Sensitization

No Mutagenic effects data available

No Teratogenic effects data available

No Carcinogenic effects data available

Reproductive toxicity

[GHS Cat. Japan, base data]

(Methanol) cat.1B; mouse : PATTY 5th, 2001

Delayed and immediate effects and also chronic effects from short- and long-term exposure

STOT

STOT-single exposure

[cat.1]

[Japan published data]

(Methanol) CNS; vision/organ of vision; systemic toxicity (DFGOT vol.16, 2001)

[cat.3(drow./dizz.)]

[Japan published data]

(Methanol) Narcosis (PATTY 5th, 2001)

STOT-repeated exposure

[cat.1]

[Japan published data]

(Methanol) CNS; vision/organ of vision (ACGIH 7th, 2001)

No Aspiration hazard data available

Additional data

There are no data available on the preparation itself.

12. Ecological Information

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Toxicity

Aquatic toxicity

Aquatic acute toxicity component(s) data

[GHS Cat. Japan, base data]

(Methanol) Crustacea (Brine shrimp) LC50=900.73 mg/L/24hr (EHC196, 1998)

Water solubility

(Hydroxylamine hydrochloride) 83 g/100 ml (17°C) (ICSC, 1997)

(Methanol) 100 g/100 ml (PHYSPROP Database, 2009)

No Persistence and degradability data available

Bioaccumulative potential

(Methanol) log Pow=-0.77 (HSDB)

Additional information

There are no data available on the preparation itself.

13. Disposal considerations

Waste treatment methods

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

14. Transport Information

UN No, UN CLASS

UN number :1992

UN proper shipping name :FLAMMABLE LIQUID, TOXIC, N.O.S.

Transport hazard class(es) :3

Transport subsidiary risks :6.1

Packing group :II

ERG GUIDE NO :131

Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

Noxious Liquid ; Cat. Y

Methanol

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

US major regulations

TSCA

Methanol; Eriochrome Black T; Hydroxylamine hydrochloride

Other regulatory information

We are not able to check up the regulatory information in regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

Regulatory information with regard to this substance in your country or in your region should be examined by your own responsibility.

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

16. Other information

GHS classification and labelling

Flam. Liq. 2 : H225 Highly flammable liquid and Vapor

Acute Tox. 4 : H302 Harmful if swallowed

Eye Irrit. 2 : H319 Causes serious eye irritation

Repr. 1B : H360 May damage fertility or the unborn child

STOT SE 1 : H370 Causes damage to organs after single exposure

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STOT SE 3 : H336 May cause drowsiness and dizziness

STOT RE 1 : H372 Causes damage to organs through prolonged or repeated exposure

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 are advised to make their own tests to determinate 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 Japan official data