

Safety Data Sheet

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

Product identifier:

Product name: Methyl chloroacetate

Product code(SDS NO): 28230jis_E2-1

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

Division: Quality Assurance Department

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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 3

HEALTH HAZARDS

Acute toxicity Oral: Category 3

Acute toxicity Dermal: Category 2

Acute toxicity Inhalation: Category 2

Skin corrosion/irritation: Category 1

Serious eye damage/eye irritation: Category 1

Skin sensitization: Category 1

Specific target organ toxicity – single exposure: Category 2(systemic toxicity)

Specific target organ toxicity – single exposure: Respiratory tract irritation Category 3

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment – acute hazard: Category 2

Hazardous to the aquatic environment – long-term hazard: Category 2

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

Label elements



Signal word: Danger

HAZARD STATEMENT

Flammable liquid and vapor

Toxic if swallowed

Fatal in contact with skin

Fatal if inhaled

Causes severe skin burns and eye damage

Causes serious eye damage

May cause an allergic skin reaction

May cause damage to organs after single exposure

May cause respiratory irritation

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT**Prevention**

Avoid release to the environment.
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Keep container tightly closed.
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.
Wear respiratory protection.(as specified by the manufacturer/supplier or the competent authority.)
Use only outdoors or in a well-ventilated area.
Do not get in eyes, on skin, or on clothing.
Wash contaminated parts thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves, protective clothing or face protection.
Wear protective gloves and face protection.
Wear eye protection/face protection.
Do not eat, drink or smoke when using this product.

Response

In case of fire: Use appropriate media.
Collect spillage.
Immediately call a POISON CENTER or doctor/physician.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF ON SKIN: Gently wash with plenty of soap and water.
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.
Take off immediately all contaminated clothing and wash it before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage

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

Disposal

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

Physical and Chemical hazards

Flammable liquid. Vapor/air mixture may explode.

3. Composition/information on ingredients**Substance/Mixture:****Substance**

Ingredient name:methyl chloroacetate
Content(%):98.0<
Chemical formula:C3H5ClO2
Chemicals No, Japan:2-1149
CAS No.:96-34-4
MW:108.52
ECNO:202-501-1

4. First-aid measures

Descriptions of first-aid measures

General measures

Immediately call a POISON CENTER or doctor/physician.

IF INHALED

Remove person to fresh air and keep 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.

Gently wash with plenty of soap and water.

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. Do NOT induce vomiting.

Immediately call a POISON CENTER or doctor/physician.

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

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 protective gloves/protective clothing/eye protection/face 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 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

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**

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

Keep cool. Protect from sunlight.

Store locked up.

8. Exposure controls/personal protection**Control parameters**

No control value data available

Adopted value

No Adopted value data available

Exposure controls**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 respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Safety and Health measures

Do not get in eyes, on skin, or on clothing.

Wash ... thoroughly after handling.

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

Contaminated work clothing should not be allowed out of the workplace.

Take off immediately all contaminated clothing and wash it before reuse.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical properties

Appearance: Liquid

Color: Colorless

Odor: Characteristic odor

pH: 4.6 (28g/L, 20°C)

Phase change temperature

Initial Boiling Point/Boiling point: 129.5°C

Melting point/Freezing point: -32.1°C

Decomposition temperature data N.A.

Flash point: (c.c.) 47°C

Auto-ignition temperature: 465°C

Explosive properties: Flammability or explosive limit

lower limit: 7.5 vol %

upper limit: 18.5 vol %

Vapor pressure: 650 Pa (20°C)

Relative Vapor Density (Air=1): 3.7

Relative density of the Vapor/air-mixture at 20°C (Air = 1): 1.02

Specific gravity/Density: 1.231~1.240 g/ml (20°C)

Solubility

Solubility in water: 5.2 g/100 ml (19.8 C)

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

10. Stability and Reactivity

Chemical stability

Stable under normal storage/handling conditions.

Flammable.

Possibility of hazardous reactions

The vapour is heavier than air.

Decomposes on burning. This produces corrosive fumes.

Reacts with reducing agents and oxidants.

Conditions to avoid

Contact with incompatible materials.

Open flames. Heat.

Incompatible materials

Strong acids, Strong bases, Oxidizing agents, Reducing agents

Hazardous decomposition products

Carbon oxides, Hydrogen chloride, Chlorides.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]

rat LD50=107mg/kg (DFGOT Vol.9, 1998)

Acute toxicity (Dermal)

[GHS Cat. Japan, base data]

rat LD50 =137 mg/kg (DFGOT Vol.9, 1998)

Acute toxicity (Inhalation)

[GHS Cat. Japan, base data]

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vapor : rat LC50=210-315 ppm (IUCLID, 2000)

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]

rabbit : irreversible damage (DFGOT Vol.9, 1998 et al.)

Serious eye damage /irritation

[GHS Cat. Japan, base data]

rabbit : severe irritation (DFGOT Vol.9, 1998 et al.)

Sensitization

Skin sensitization

[GHS Cat. Japan, base data]

cat.1; guinea pig : DFGOT vol.9, 1998

Germ cell mutagenicity

[GHS Cat. Japan, base data]

mouse(oral) bone marrow micronucleus test (in vivo somatic cell mutagenicity tests) : Negative

(DFGOT Vol.9, 1998)

Reverse-mutation assay in bacteria(Ames test) :Negative(DFGOT Vol.9, 1998)

No Carcinogenic effects data available

No reproductive toxicity data available

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

STOT

STOT-single exposure

[cat.2]

[Japan published data]

systemic toxicity (BUA 150, 1994)

[cat.3(resp. irrit.)]

[Japan published data]

Respiratory tract irritation (DFGOT Vol.9, 1998)

No Aspiration hazard data available

12. Ecological Information

Toxicity

Aquatic toxicity

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

Aquatic acute toxicity component(s) data

[GHS Cat. Japan, base data]

Fish (Danio rerio) LC50 = 1.13mg/L/96hr (IUCLID, 2000)

Water solubility

5.2 g/100 ml (19.8°C) (ICSC, 2001)

Persistence and degradability

BOD_Degradation : 29~75% at 4weeks (Registered chemicals data check & review, Japan, 1989)

No Bioaccumulative potential data available

13. Disposal considerations

Waste treatment methods

Avoid release to the environment (- if this is not the intended use).

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

14. Transport Information

UN No, UN CLASS

UN number: 2295
UN proper shipping name: METHYL CHLOROACETATE
Transport hazard class(es): 6.1
Transport subsidiary risks: 3
Packing group: I
ERG GUIDE NO.: 155

15. Regulatory Information

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

US major regulations

TSCA

methyl chloroacetate

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. 3: H226 Flammable liquid and vapor

Acute Tox. 3: H301 Toxic if swallowed

Acute Tox. 2: H310 Fatal in contact with skin

Acute Tox. 2: H330 Fatal if inhaled

Skin Corr. 1: H314 Causes severe skin burns and eye damage

Eye Dam. 1: H318 Causes serious eye damage

Skin Sens. 1: H317 May cause an allergic skin reaction

STOT SE 2: H371 May cause damage to organs after single exposure

STOT SE 3: H335 May cause respiratory irritation

Aquatic Acute 2: H401 Toxic to aquatic life

Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), 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)

2016 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)

General Disclaimer

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.



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The GHS classification data given here is based on current Japan official data (NITE published in 2015).