Safety Data Sheet

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

Product identifier:

Product name: 2-Ethylhexyl methacrylate

Product code(SDS NO): 73060jis_J_E1-1

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

Telephone number: +81-48-986-6161

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e-mail address: shiyaku-t@junsei.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

Physical and chemical hazards

Flammable liquids: Category 4

HEALTH HAZARDS

Skin corrosion/irritation: Category 2

Reproductive toxicity: Category 2

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: Warning

HAZARD STATEMENT

Combustible liquid

Causes skin irritation

Suspected of damaging fertility or the unborn child

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

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

Avoid release to the environment.

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

Wash contaminated parts thoroughly after handling.

Wear protective gloves and face protection.

Use personal protective equipment as required.

Response

In case of fire: Use appropriate media other than water for extinction.

Collect spillage.

IF exposed or concerned: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

Storage

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

Disposal

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

Physical and Chemical hazards

Heating may cause fire.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name:2-Ethylhexyl methacrylate
Content(%):99.0 <
Chemical formula:C12H22O2
Chemicals No, Japan:2-1039
CAS No.:688-84-6
MW:198.30
ECNO:211-708-6

4. First-aid measures

Descriptions of first-aid measures

General measures

IF exposed or concerned: Get medical attention/advice.

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.
Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice/attention.
If skin irritation 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.

Most important symptoms and effects, both acute and delayed

(Symptoms when skin and/or eye contact)

Redness.

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.

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 peace operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.
In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
Ventilate area after material pick up is complete.
Wear proper protective equipment.

Environmental precautions

Avoid release to the rivers, lakes, ocean and 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.
Stop leak if you can do it without risk.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Protective measures against fire and 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, fume, gas, mist or vapor.

Safety Measures/Incompatibility

Do not handle until all safety precautions have been read and understood.
Wear protective gloves, protective clothing or face protection.
Wear protective gloves and 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 in MHLW
Adopted value
No Adopted value data available in JSOH
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. Recommended material(s): nitrile, viton
Consult with your glove and/or personnel equipment manufacturer for selection of appropriate compatible materials.
Eye protection
Wear safety glasses with side-shields.
Wear eye/face protection.
Safety and Health measures
Wash ... thoroughly after handling.
Take off 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 data N.A.
Phase change temperature
Initial Boiling Point/Boiling point: 113℃
Melting point/Freezing point: <-50℃
Decomposition temperature data N.A.
Flash point: 92℃
Auto-ignition temperature: 250℃
Explosive properties data N.A.
Vapor pressure: 133 Pa (20℃)
Relative Vapor Density (Air=1): 6.8
Relative density of the Vapor/air-mixture at 20℃ (Air = 1): 1.01
Specific gravity/Density: 0.882～0.888 g/ml(20℃)
Solubility
Solubility in water: none
n-Octanol /water partition coefficient: log Pow4.54

10. Stability and Reactivity
Reactivity
Runaway polymerization may occur when heated.
Chemical stability
Stable under normal storage/handling conditions.

Possibility of hazardous reactions

Vapours are uninhibited and may polymerize in vents or flame arresters, causing blockage.

The substance may polymerize due to warming.

Conditions to avoid

Contact with incompatible materials.

Open flames. Heat.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon oxides

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]

rat LD50 >2000 mg/kg (OECD TG401) (JECDB, Access on November 2015 et al.)

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]

rabbit : moderately irritating(SIDS, 2009)

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Carcinogenic effects data available

Reproductive toxicity

[GHS Cat. Japan, base data]

cat.2; JECDB, Access on November 2015

No STOT-single/repeated exposure data available

No Aspiration hazard data available

12. Ecological Information

Ecotoxicity

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（Atheriniformes） LC50=2.78mg/L/96hr （NITE risk assesment book, 2008)

Water solubility

none (ICSC, 1998)

Persistence and degradability

Degrade rapidly [BOD_Degradation : 88%/28 days; GC_Degradation: 100%/28 days (MITI official bulletin)]

Bioaccumulative potential

log Pow=4.54 (PHYSPROP Database, 2009)

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: 3082
UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es): 9
Packing group: III
ERG GUIDE NO.: 171

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
US major regulations
TSCA
2-Ethylhexyl methacrylate
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. 4: H227 Combustible liquid
Skin Irrit. 2: H315 Causes skin irritation
Repr. 2: H361 Suspected of damaging fertility or the unborn child
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 19th edit., 2015 UN Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2017 TLVs and BEIs. (ACGIH)
http://monographs.iarc.fr/ENG/Classification/index.php
Supplier's data/information
NITE Chemical Risk Information Platform(NITE-CHRIP)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.
The GHS classification data given here is based on current Japan official data (NITE published in 2016).