

Safety Data Sheet

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

Product identifier:

Product name: Xylene

Reference number(SDS): 25165jis_J_E1-7

Product type:

Reagent

Details of the supplier of the safety data sheet

Manufacturer/Supplier: JUNSEI CHEMICAL CO., LTD.

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

Division: Quality Assurance Department

Telephone number: +81-48-986-6161

FAX: +81-48-989-2787

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

Section 2. Hazards identification

GHS classification and label elements of the product**Classification of the substance or mixture****PHYSICAL AND CHEMICAL HAZARDS**

Flammable liquids: Category 3

HEALTH HAZARDS

Acute toxicity (Dermal): Category 4

Acute toxicity (Inhalation): Category 4

Skin corrosion/irritation: Category 2

Serious eye damage/eye irritation: Category 2

Carcinogenicity: Category 2

Reproductive toxicity: Category 1B

Specific target organ toxicity – single exposure: Category 1 (central nervous system, respiratory system, liver, kidney)

Specific target organ toxicity – single exposure: Category 3 (Narcotic effects)

Specific target organ toxicity – repeated exposure: Category 1 (respiratory system, nervous system, auditory organ)

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment, short-term (acute): Category 2

Hazardous to the aquatic environment, long-term (chronic): Category 2

(Note) GHS classification without description: Not classified/Classification not possible

Label elements

Signal word: Danger

HAZARD STATEMENT

H226-Flammable liquid and vapor

H312-Harmful in contact with skin

H332-Harmful if inhaled

H315-Causes skin irritation

H319-Causes serious eye irritation

H351-Suspected of causing cancer

- H360–May damage fertility or the unborn child
- H370–Causes damage to organs
- H336–May cause drowsiness or dizziness
- H372–Causes damage to organs through prolonged or repeated exposure
- H401–Toxic to aquatic life
- H411–Toxic to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Avoid release to the environment.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Keep container tightly closed.
- Ground and bond container and receiving equipment.
- Use explosion–proof electrical/ventilating/lighting equipment.
- Use non–sparking tools.
- Take action to prevent static discharges.
- Do not breathe vapors.
- Use only outdoors or in a well–ventilated area.
- Wash contaminated parts thoroughly after handling.
- Wear protective gloves/protective clothing/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 water mist, foam, dry powder, CO2 to extinguish.
- Collect spillage.
- Get medical advice/attention if you feel unwell.
- IF exposed or concerned: Get medical advice/attention.
- Call a POISON CENTER/doctor/physician if you feel unwell.
- IF exposed or concerned: Call a POISON CENTER/doctor/physician.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF ON SKIN: Wash with plenty of soap and water.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- If skin irritation occurs: Get medical advice/attention.
- Take off 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 eye irritation persists: Get medical advice/attention.

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.

Specific Physical and Chemical hazards

- Flammable liquid. Vapor/air mixture may explode.

Section 3. Composition/information on ingredients

Mixture/Substance selection:

Mixture

- Ingredient name: Xylene (Mixture of isomers)
- Content (%): 85
- Chemical formula: C₈H₁₀

Chemicals No, Japan:3-3;3-60

CAS No.:1330-20-7

MW:106.17

EC No.:215-535-7

Ingredient name:Ethylbenzene

Content (%):15

Chemical formula:C₈H₁₀

Chemicals No, Japan:3-28;3-60

CAS No.:100-41-4

MW:106.17

EC No.:202-849-4

Note : The figures shown above are not the specifications of the product.

Section 4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical advice/attention if you feel unwell.

Keep victim warm and quiet.

Call emergency medical service.

Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Give artificial respiration if victim is not breathing.

Administer oxygen if breathing is difficult.

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

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water or 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.

In case of burns, immediately cool affected skin for as long as possible with child water.

Do not remove clothing if adhering to skin.

Remove and isolate contaminated clothing and shoes.

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/doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

(Symptoms when inhalation or ingestion)

Dizziness. Drowsiness. Headache. Nausea. Burning sensation. Abdominal pain.

(Symptoms when skin and/or eye contact)

Dry skin. Conjunctival redness of the eyes. Redness of the skin. Pain of the eyes.

Indication of any immediate medical attention and special treatment needed

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

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 resistant or flame retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with a full facepiece operated in the positive pressure mode.

Section 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 until material pick up is complete.

Wear proper protective equipment.

PUBLIC SAFETY: Ventilate closed spaces before entering.

Do not touch or walk through spilled material.

Environmental precautions

Runoff to sewer may create fire or explosion hazard.

Vapors may form explosive mixtures with air.

Avoid release to headsprings, rivers, lakes, ocean and groundwater.

Methods and materials for containment and cleaning up

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Use clean non-sparking tools to collect absorbed material.

All equipment used when handling the product must be grounded.

Preventive measures for secondary accident

Collect spillage.

Stop leak if you can do it without risk.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Prevent entry into waterways, sewers, basements or confined areas.

Keep out of low areas.

Section 7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe vapors.

(Protective measures against fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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- Ground and bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use non-sparking tools.
- Take action to prevent static discharges.

(Exhaust/ventilator)

- Exhaust/ventilator should be available.

(Safety treatments)

- Avoid contact with skin.
- Avoid contact with eyes.

Safety Measures

- 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/eye protection/face protection.
- Use personal protective equipment as required.
- When using do not eat, drink or smoke.

Any incompatibilities

- Strong acids, Strong oxidizing agents should not be mixed with the chemicals.

Advice on general occupational hygiene

- Wash contaminated parts thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Take off contaminated clothing and wash it before reuse.

Storage**Conditions for safe storage**

- Store in a well-ventilated place. Keep container tightly closed.
- Keep cool. Protect from sunlight.
- Store in accordance with local/national regulation.
- Store locked up.

Container and packaging materials for safe handling data is not available.

Specific end use(s)

- See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

Section 8. Exposure controls/personal protection**Control parameters****Control value and Concentration standard value**

(Xylene (Mixture of isomers))

Japan control value 50ppm

(Ethylbenzene)

Japan control value 20ppm

Adopted value

(Xylene (Mixture of isomers))

JSOH(2001) 50ppm; 217mg/m³

ACGIH(2021) TWA: 20ppm (Eye & URT irr; hematologic eff; ototoxicity; CNS impair)

(Ethylbenzene)

JSOH(2020) 20ppm; 87mg/m³ (skin)

ACGIH(2021) TWA: 20ppm (URT & eye irr; ototoxicity; kidney eff; CNS impair)

[ACGIH] Notation

(Xylene (Mixture of isomers))

OTO

(Ethylbenzene)

OTO

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.
- Recommended respiratory protection: Gas mask (e.g. JIS T8152)

Hand protection

- Wear protective gloves. Recommended material(s): viton
- Inspect before use and replace worn or damaged gloves.
- Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions.
- Chemical-resistant, impervious gloves complying with an approved standard (e.g. JIS T8116) should be used.

Eye protection

- Wear safety glasses with side-shields.
- Wear eye/face protection.

Skin and body protection

- Wear impervious clothing and boots in case of repeated or prolonged treatment.
- Personal protective equipment for the body and skin should be selected based on the task being performed and the risks involved.

Section 9. Physical and Chemical Properties**Information on basic physical and chemical properties**

Physical state: Liquid

Color: Colorless

Odor: Characteristic odor

Odor threshold: 60 mg/m³(as Xylene (Mixture of isomers)); 8.7~870.0 mg/m³(as Ethylbenzene)

Melting point/Freezing point: <-25°C (Xylene (Mixture of isomers))

Boiling point or initial boiling point: 139.1°C(Xylene (Mixture of isomers))

Boiling range data is not available.

Flammability (gases, liquids and solids): Ignitable

Lower and upper explosion limit/flammability limit:

Lower explosion limit: 1.0 vol %(Ethylbenzene)

Upper explosion limit: 6.7 vol %(Ethylbenzene)

Flash point: 29°C(Xylene (Mixture of isomers))

Auto-ignition temperature: 432°C(Ethylbenzene)

Decomposition temperature data is not available.

Self-Accelerating Decomposition Temperature/SADT data is not available.

pH data is not available.

Dynamic viscosity data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water: Insoluble

Solubility in solvent: Miscible with the usual organic solvents.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density: 0.860~0.870 g/ml (20°C)

Relative vapor density (Air=1) data is not available.

Relative density of the Vapor/air - mixture at 20°C (Air = 1) data is not available.

Particle characteristics data is not available.

Other information

Critical temperature data is not available.

Evaporation rate data is not available.

VOC data is not available.

Other information is not available.

Section 10. Stability and Reactivity

Reactivity

Runaway polymerization will not occur.

Chemical stability

Stable under normal storage/handling conditions.

Flammable.

Possibility of hazardous reactions

As a result of flow, agitation, etc., electrostatic charges can be generated.

Reacts with strong acids and strong oxidants.

Conditions to avoid

Contact with incompatible materials.

Open flames. Heating. Sparks.

Incompatible materials

Strong acids, Strong oxidizing agents

Hazardous decomposition products

Carbon oxides

Section 11. Toxicological Information

The product has not been subjected to toxicological testing. Refer to the available data on the constituents.

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

[GHS Cat. Japan, base data]

(Xylene (Mixture of isomers))

rat LD50=3500~8800mg/kg (NITE risk assessment, 2008)

(Ethylbenzene)

rat LD50=3500~4700mg/kg (AICIS IMAP, 2020)

Acute toxicity (Dermal)

[Product]

Category 4, Harmful in contact with skin

[Data for components of the product]

[GHS Cat. Japan, base data]

(Xylene (Mixture of isomers))

rabbit LD50=1700mg/kg (EPA Pesticide, 2005)

(Ethylbenzene)

rabbit LD50=15400mg/kg (ACGIH, 2011)

Acute toxicity (Inhalation)

[Product]

Category 4, Harmful if inhaled

Xylene, JUNSEI CHEMICAL CO., LTD., 25165jis_J_E1-7, 19/Mar/2024

[Data for components of the product]

[GHS Cat. Japan, base data]

(Xylene (Mixture of isomers))

vapor: rat LC50=6350~6700ppm/4hr (NITE Initial Risk Assessment Report, 2008)

(Ethylbenzene)

vapor: rat LC50=4000ppm/4hr (OEL Documentations (JSOH), 2020)

mist: rat LC50=55mg/L/2hr (calc.: 27.5mg/L/4hr)

(MOE Result of the initial environmental risk assessment of chemicals, 2015)

Irritant properties

Skin corrosion/irritation

[Product]

Category 2, Causes skin irritation

[Data for components of the product]

[GHS Cat. Japan, base data]

(Xylene (Mixture of isomers))

rabbit : erythema, edema, necrosis (CERI/NITE Hazard Assessment Report, 2008)

Serious eye damage/irritation

[Product]

Category 2, Causes serious eye irritation

[Data for components of the product]

[GHS Cat. Japan, base data]

(Xylene (Mixture of isomers))

rabbit : mild~moderate irritation (CERI/NITE Hazard Assessment Report, 2008)

(Ethylbenzene)

rabbit : mild irritation (NITE Initial Risk Assessment Report, 2007 et al)

Sensitization

Respiratory sensitization

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Skin sensitization

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Germ cell mutagenicity

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

No data available.

Carcinogenicity

[Product]

Category 2, Suspected of causing cancer

[Data for components of the product]

[GHS Cat. Japan, base data]

(Ethylbenzene)

cat.2; IARC Gr. 2B (IARC, 2000)

[IARC]

(Xylene (Mixture of isomers))

Group 3 : Not classifiable as to its carcinogenicity to humans

(Ethylbenzene)

Group 2B : Possibly carcinogenic to humans

[ACGIH]

(Xylene (Mixture of isomers))

A4(2021) : Not Classifiable as a Human Carcinogen

(Ethylbenzene)

A3(2021) : Confirmed Animal Carcinogen with Unknown Relevance to Humans

[EPA]

(Xylene (Mixture of isomers))

I; Data are inadequate for an assessment of human carcinogenic potential(1999)

(Ethylbenzene)

Group D; Not classifiable as to human carcinogenicity(1986)

[JSOH]

(Ethylbenzene)

Group 2B: The agents which are probably or possibly carcinogenic to humans

Reproductive toxicity

[Product]

Category 1B, May damage fertility or the unborn child

[Data for components of the product]

[GHS Cat. Japan, base data]

(Xylene (Mixture of isomers))

cat. 1B; ATSDR, 2007

(Ethylbenzene)

cat. 1B; Recommendation of Occupational Exposure Limits (JSOH), 2021; ACGIH 7th, 2011 et al.

Specific target organ toxicity (STOT)

STOT-single exposure

[Product]

Category 1, Causes damage to organs

Category 3, May cause drowsiness or dizziness

[Data for components of the product]

[cat.1]

[GHS Cat. Japan, base data]

(Xylene (Mixture of isomers))

liver, central nervous system, respiratory system, kidneys (CERI/NITE Hazard Assessment Report, 2008)

[cat.3 (respiratory tract irritation)]

[GHS Cat. Japan, base data]

(Ethylbenzene)

respiratory tract irritation (ACGIH, 2011; AICIS IMAP, 2020)

[cat.3 (narcotic effects)]

[GHS Cat. Japan, base data]

(Xylene (Mixture of isomers))

narcotic effect (CERI/NITE Hazard Assessment Report, 2008)

(Ethylbenzene)

narcotic effect (ACGIH, 2011)

STOT-repeated exposure

[Product]

Category 1, Causes damage to organs through prolonged or repeated exposure

[Data for components of the product]

[cat.1]

[GHS Cat. Japan, base data]

(Xylene (Mixture of isomers))

nervous system, respiratory system (CERI/NITE Hazard Assessment Report, 2008)

(Ethylbenzene)

auditory organ, nervous system (JSOH OEL Documentations, 2020)

Aspiration hazard

[Product]

Classification not possible (Insufficient data available or no data available).

[Data for components of the product]

[cat.1]

[GHS Cat. Japan, base data]

(Xylene (Mixture of isomers))

cat. 1; hydrocarbon, kinematic viscosity=0.86(o-), 0.67(m-), 0.70(p-) mm²/s (25°C)

(HSDB, Access on December 2014)

(Ethylbenzene)

cat. 1; hydrocarbon, kinematic viscosity=0.63 mm²/s (40°C) (CLH Report, 2010)

Section 12. Ecological Information

The product has not been subjected to ecotoxicological testing. Refer to the available data on the constituents.

Toxicity

Aquatic toxicity

[Product]

Category 2, Toxic to aquatic life

Category 2, Toxic to aquatic life with long lasting effects

[Data for components of the product]

Hazardous to the aquatic environment, short-term (acute)

[GHS Cat. Japan, base data]

(Xylene (Mixture of isomers))

Fish (rainbow trout) LC50=3.3mg/L/96hr (NITE Initial Risk Assessment, 2005)

(Ethylbenzene)

Crustacea (bayshrimp) LC50=0.42mg/L/96hr (NITE Initial Risk Assessment Report, 2007)

Hazardous to the aquatic environment, long-term (chronic)

[GHS Cat. Japan, base data]

(Ethylbenzene)

Crustacea (*Ceriodaphnia reticulata*) NOEC=0.956mg/L/7days

(MOE Result of the initial environmental risk assessment of chemicals, 2015)

Water solubility

(Xylene (Mixture of isomers))

160 mg/L (25°C) (HSDB)

(Ethylbenzene)

0.015 g/100 ml (20°C) (ICSC, 2007)

Persistence and degradability

[Data for components of the product]

(Xylene (Mixture of isomers))

Not rapidly degradable [BOD_Degradation : 39% (NITE Initial Risk Assessment Report, 2005)]

(Ethylbenzene)

Not rapidly degradable [BOD_Degradation : 0% (MITI official bulletin, 1990)]

Bioaccumulative potential

[Data for components of the product]

(Xylene (Mixture of isomers))

log Pow=3.16 (PHYSPROP DB, 2005)

(Ethylbenzene)

log Pow=3.15 (PHYSPROP DB, 2005)

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods

Avoid release to the environment.

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

Section 14. Transport Information

UN No., UN CLASS

UN Number or ID Number : 1307

UN Proper Shipping Name : XYLENES

Class or division (Transport hazard class) : 3

Packing group : II

ERG GUIDE No.: 130

IMDG Code (International Maritime Dangerous Goods Regulations)

UN Number or ID Number : 1307

UN Proper Shipping Name : XYLENES

Class or division (Transport hazard class) : 3

Packing group : II

IATA (Dangerous Goods Regulations)

UN Number or ID Number : 1307

UN Proper Shipping Name : XYLENES

Class or division (Transport hazard class) : 3

Hazard labels : Flamm.liquid

Packing group : II

Environmental hazards

Marine pollutants (yes/no) : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Noxious Liquid Substances ; Cat. Y

Ethylbenzene; Xylene (Mixture of isomers)

MARPOL Annex V – HME (Harmful to the Marine Environment)

Reproductive toxicity: cat.1, 1A, 1B

Xylene (Mixture of isomers); Ethylbenzene

Specific target organ toxicity – repeated exposure: cat.1

Xylene (Mixture of isomers); Ethylbenzene

Hazardous to the aquatic environment – short-term (acute): cat.1

Ethylbenzene

Hazardous to the aquatic environment – long-term (chronic): cat.1, 2

Xylene (Mixture of isomers); Ethylbenzene

Section 15. Regulatory Information

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

Labor Standards Act, Japan

Chemical substances or compounds (including alloys) causing disease (Regulation, Appended Table1-2-4-1)

Xylene (Mixture of isomers)

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

100-41-4; 1330-20-7

All components are listed or exempted.

Superfund Amendments and Reauthorizations Act (SARA), Title III

SARA 313 (TRI)

Ethylbenzene; Xylene (Mixture of isomers)

Other regulatory information

We are not able to check up the regulatory information with 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.

Regulatory information in this section are limited to intentional ingredient(s), but does not contain information on non-intentional ingredients or impurities which are not informed by supplier(s).

Chemical safety assessment

Advice on safe handling for this product can be found in sections 7 and 8 of this SDS.

Section 16. Other information

GHS classification and labelling

H226-Flammable liquids, Category 3: H226 Flammable liquid and vapour

H312-Acute toxicity, Category 4: H312 Harmful in contact with skin

H332-Acute toxicity, Category 4: H332 Harmful if inhaled

H315-Skin corrosion/irritation, Category 2: H315 Causes skin irritation

H319-Serious eye damage/eye irritation, Category 2: H319 Causes serious eye irritation

H351-Carcinogenicity, Category 2: H351 Suspected of causing cancer

H360-Reproductive toxicity, Category 1B: H360 May damage fertility or the unborn child

H370-STOT - single exposure, Category 1: H370 Causes damage to organs

H336-STOT - single exposure, Category 3, Narcotic effects: H336 May cause drowsiness or dizziness.

H372-STOT - Repeated exposure, Category 1: H372 Causes damage to organs through prolonged or repeated exposure

H401-Hazardous to the aquatic environment, short-term (acute), Category 2: H401 Toxic to aquatic life

H411-Hazardous to the aquatic environment, long-term (chronic), Category 2: H411 Toxic to aquatic life with long lasting effects

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 22nd edit., 2021 UN

IMDG Code, 2022 Edition (Incorporating Amendment 41-22)

IATA Dangerous Goods Regulations (65th Edition) 2024

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2024 TLVs and BEIs. (ACGIH)

JIS Z 7252 : 2019

JIS Z 7253 : 2019

2023 Recommendation on TLVs (JSOH)

Notification No. 0111-1 (January 11, 2022), Chemical Hazards Control Division, Industrial Safety and Health Department, Labour Standards Bureau, MHLW in Japan

Supplier's data/information

Chemicals safety data management system "GHS Assistant" Version 4.27 (<https://www.asahi-ghs.com/>)

NITE Chemical Risk Information Platform "NITE-CHRIP"

(https://www.nite.go.jp/en/chem/chrip/chrip_search/systemTop)

GHS Classification Guidance for Enterprises 2019 Revised Edition (Ver. 2.0) (Mar. 2020, METI)

Abbreviations and acronyms

SDS (Safety Data Sheet)

LD50 (Lethal Dose, 50%)

LC50 (Lethal Concentration, 50%)

IARC (International Agency for Research on Cancer)

ACGIH (American Conference of Governmental Industrial Hygienists)

EPA (US Environmental Protection Agency)

NTP (US National Toxicology Program)

JSOH (Japan Society for Occupational Health)

EU (European Union)

EC50 (Effective Concentration, 50%)

NOEC (No Observed Effect Concentration)

BOD (Biochemical Oxygen Demand)

COD (Chemical Oxygen Demand)

BCF (Bioconcentration Factor)

anh (anhydride)

General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

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 2022).