

Issuing Date 20-Aug-2021
Revision date 1-Feb-2024
Revision Number 3.2

1. Identification

Product Name ThreeBond 3911D Aerosol

Details of the supplier of the safety data sheet

Supplier

ThreeBond Fine Chemical Co., Ltd.
1-1 Oyama-cho, Midori-ku, Sagami-hara-shi, Kanagawa 252-0146 Japan

Emergency telephone number

+81-42-703-7126 (Inquiries regarding SDS content)
+81-42-670-5333 (Inquiries regarding the product or SDS claim)

Recommended use of the chemical and restrictions on use

Recommended use Cleaner

Restrictions on use Please be sure to confirm in advance the appropriateness and safety of using the product for the relevant application. If the product is to be used for applications other than those recommended, please seek professional judgment. This product is for industrial use and its use for household and medical implants is prohibited.

2. Hazard(s) identification

GHS Classification

Aerosols	Category 1
Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Classification not possible
Acute toxicity - Inhalation (Gases)	Classification not applicable
Acute toxicity - Inhalation (Vapors)	Classification not possible
Acute toxicity - Inhalation (Dusts/Mists)	Classification not possible
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Classification not possible
Skin sensitization	Classification not possible
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Category 2
Reproductive toxicity	Category 1B
Effects on or via lactation	Classification not possible
Specific target organ toxicity (single exposure)	Category 1, Category 3
Category 1 Central nervous system.	
Category 2 visual organs, systemic toxicity.	
Category 3 Target organ effects: Respiratory irritation, Narcotic effects.	
Specific target organ toxicity (repeated exposure)	Category 1
Category 1 Central nervous system, liver, Respiratory system.	
Category 2 nervous system, visual organs.	
Aspiration hazard	Classification not possible

Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2
Ozone	Classification not possible

GHS label elements**Signal word**

Danger

Hazard statements

H222 - Extremely flammable aerosol
H229 - Pressurized container: May burst if heated
H302 - Harmful if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H351 - Suspected of causing cancer
H360 - May damage fertility or the unborn child
H335 - May cause respiratory irritation
H336 - May cause drowsiness or dizziness
H401 - Toxic to aquatic life
H370 - Causes damage to organs
H372 - Causes damage to organs through prolonged or repeated exposure
Causes damage to the following organs: Central nervous system.
May cause damage to the following organs: visual organs, systemic toxicity.
Causes damage to the following organs through prolonged or repeated exposure: Central nervous system, liver, Respiratory system.
May cause damage to the following organs through prolonged or repeated exposure: nervous system, visual organs.

Precautionary statements**Prevention**

- Do not handle until all safety precautions have been read and understood
- Wear protective gloves/protective clothing/eye protection/face protection
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Do not breathe dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area
- Avoid release to the environment
- Ground and bond container and receiving equipment
- Use non-sparking tools
- Take action to prevent static discharges
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
- Keep cool
- Obtain special instructions or technical data sheet before use
- Use explosion-proof electrical/ ventilating/ lighting/ equipment

Response

- IF exposed or concerned: Get medical advice/attention
- IF exposed or concerned: Call a POISON CENTER or doctor
- Specific treatment (see section 4 on this SDS)

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

Ingestion

- IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
- Rinse mouth

Skin

- IF ON SKIN: Wash with plenty of water and soap
- If skin irritation occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]

Inhalation

- IF INHALED: Remove person to fresh air and keep comfortable for breathing
- Call a POISON CENTER or doctor if you feel unwell

Fire

- In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

Storage

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

Disposal

- Dispose of contents/container to an approved waste disposal plant

Other hazards

May be harmful in contact with skin.

3. Composition/information on ingredients**Pure substance/mixture****Mixture**

Chemical name	CAS No.	Weight-%	ENCS Number	ISHL No.
Tetrahydrofuran	109-99-9	29	(5)-53	(5)-53
Dimethyl ether	115-10-6	50-<60	(2)-360	(2)-360
Ethyl cyclohexane	1678-91-7	6.1	(3)-2231	(3)-2231
Methyl alcohol	67-56-1	4.9	(2)-201	(2)-201
Methyl ethyl ketone	78-93-3	1-<10	(2)-542	(2)-542

Pollutant Release and Transfer Register (PRTR)

The amount of the relevant substance in certain cases referenced in article 4(i)(a) or 4(i)(b) of the Enforcement Order of the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Act) is calculated based on the conversion factors shown (with safety factor = 1 in cases where conversion factor information is not available)

Chemical name	Cabinet order name	Metal, CN, F, etc.	Conversion coefficient	Category	Ordinance number	Control number
Tetrahydrofuran	Tetrahydrofuran			Class I designated chemical substance	1-302	674
Ethyl cyclohexane	Ethyl Cyclohexane			Class I designated chemical substance	1-65	591

Industrial Safety and Health Law**ISHL Notifiable Substances**

Article 57-2 of the ISHL, Article 18-2, Item 1, Item 2, Table 9 and Item 3, Table 3 of Order for Enforcement

Harmful substances requiring risk assessment

Article 57-3 of the ISHL

Chemical name	Ministerial Ordinance Name	CAS No.	Implementation date
Tetrahydrofuran	Tetrahydrofuran	109-99-9	
Methyl alcohol	Methanol	67-56-1	
Methyl ethyl ketone	Methyl ethyl ketone	78-93-3	

Harmful Substances Whose Names Are to be Indicated on the Label

Article 57 of ISHL, Article 18, Item 1, Item 2, Table 9 and Item 3, Table 3 of Order for Enforcement

Chemical name	Ministerial Ordinance Name	CAS No.	Implementation date
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Tetrahydrofuran	Tetrahydrofuran	109-99-9	
Methyl alcohol	Methanol	67-56-1	
Methyl ethyl ketone	Methyl ethyl ketone	78-93-3	

Poisonous and Deleterious Substances Control Law

Not applicable

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (CSCL)

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed

Chemical name	CAS No.	Chemical Substances Control Law
Tetrahydrofuran	109-99-9	Priority assessment chemical substance

4. First-aid measures

General advice	Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.
In case of inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.
In case of skin contact	If symptoms persist, call a physician. Wash off immediately with soap and plenty of water for at least 15 minutes.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. If symptoms persist, call a physician.
In case of ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
Most important symptoms/effects, acute and delayed	May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8). Avoid contact with skin, eyes or clothing.
Note to physicians	Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray.
Unsuitable extinguishing media	DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.
Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Cylinders may rupture under extreme heat. Damaged cylinders should be handled only by specialists. Containers may explode when heated. In the event of fire, cool container with water spray.
Flammable properties	Containers may explode when heated.
Special Extinguishing Media	Cool container with water spray.

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
Other information	CAUTION: Use of water spray when fighting fire may be inefficient.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharges. Avoid breathing dust/fume/gas/mist/vapors/spray.
For emergency responders	Use personal protection recommended in Section 8.
Environmental precautions	Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.
Methods for containment	Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Flood with water to complete polymerization and scrape off floor.
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.
Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

7. Handling and storage

Handling

Advice on safe handling	Take equipment measures listed in Section 8. Wear protection gear. Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use spark-proof tools and explosion-proof equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Keep in an area equipped with sprinklers. Do not puncture or incinerate cans. Contents under pressure. In case of rupture. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment.
Hygiene Measures	Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

Storage

Storage Conditions	Protect from sunlight. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store in a cool, dry area away from potential sources of heat, open flames, sunlight or other chemicals. Keep out of the reach of children. Store locked up.
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8. Exposure controls/personal protection

Exposure guidelines

Chemical name	Japan Society of Occupational Health	ISHL Working Environmental Evaluation Standards - Administrative Control Levels	ACGIH TLV	Japan ISHA Workplace exposure limit - 8 hours	Japan ISHA Workplace exposure limit - Short time
Tetrahydrofuran 109-99-9	TWA: 50 ppm TWA: 148 mg/m ³ S*	50 ppm	STEL: 100 ppm TWA: 50 ppm S*	-	-
Methyl alcohol 67-56-1	TWA: 200 ppm TWA: 260 mg/m ³ S*	200 ppm	STEL: 250 ppm TWA: 200 ppm S*	-	-
Methyl ethyl ketone 78-93-3	TWA: 200 ppm TWA: 590 mg/m ³	200 ppm	STEL: 300 ppm TWA: 200 ppm	-	-

Biological monitoring indicator

Chemical name	Japan Society of Occupational Health	ACGIH
Tetrahydrofuran 109-99-9	2 mg/L - urine (Tetrahydrofuran) - end of shift	2 mg/L - urine (Tetrahydrofuran) - end of shift
Methyl alcohol 67-56-1	20 mg/L - urine (Methanol) - end of shift	15 mg/L - urine (Methanol) - end of shift
Methyl ethyl ketone 78-93-3	5 mg/L - urine (Methyl ethyl ketone) - end of shift or a few hours after high exposure	2 mg/L - urine (MEK) - end of shift

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Environmental exposure controls

Install local ventilation or seal source of substances. Install safety shower, hand wash, and eye wash station. Clearly indicate the location.

Personal protective equipment

Respiratory protection

In case of inadequate ventilation wear respiratory protection. If workers are exposed to gases or vapors, consider wearing respiratory protective equipment (e.g., gas masks). When handling highly concentrated chemicals, consider wearing an air-supplied respirator. When selecting a respirator, the following points should be considered.
-Do not use masks in areas where the oxygen concentration is less than 18%.
-When using a gas mask in an environment where workers are exposed to dust, use an absorbent can with dustproof function.
-Select a gas mask with performance and construction suitable for the work in accordance with the Japanese Industrial Standard (JIS T8152), and refer to the data provided in the instruction manual.

Hand protection

Impervious gloves. Wear suitable gloves. Consider wearing impervious protective gloves. When selecting protective gloves, the following points should be considered.
-Referring to the impermeability class, etc. listed in the instruction manual, set a use time that allows for the work, and use protective gloves within that time range.

Eye/face protection

Tight sealing safety goggles. Safety glasses with side shields are recommended for medical or industrial exposures.

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

Antistatic boots.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid	
Color	Transparent clear	
Odor	Solvent odor	
Property	Values	Remarks • Method
Melting point / freezing point	no data available	
Initial boiling point and boiling range	60 °C or above	
Flammability	no data available	
Upper/lower flammability or explosive limits		
Upper flammability or explosive limits	no data available	
Lower flammability or explosive limits	no data available	
Flash point	-14 °C	Seta closed cup
Evaporation rate	no data available	
Autoignition temperature	no data available	
Decomposition temperature	no data available	
pH	no data available	
Viscosity		
Kinematic viscosity	no data available	
Dynamic viscosity	140 mPa·s	
Water solubility	Partially miscible	
Solubility(ies)	no data available	
Partition Coefficient (n-octanol/water)	no data available	
Vapor pressure	no data available	
Density and/or relative density		
Relative density	0.85	
Liquid Density	no data available	
Bulk density	no data available	
Relative vapor density	no data available	
Particle characteristics		
Particle Size	no data available	
Particle Size Distribution	no data available	

Other information

Explosive properties	no data available
Oxidizing properties	No data available

10. Stability and reactivity

Chemical stability	Stable under normal conditions
Possibility of hazardous reactions	No hazardous reaction could occur under normal condition.
Conditions to avoid	heating.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	May generate harmful gas by incineration.

11. Toxicological information

Acute toxicity

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	1,505.50 mg/kg
ATEmix (dermal)	2,209.90 mg/kg
ATEmix (inhalation-vapor)	32.1703 mg/l

Unknown acute toxicity

59.626 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Numerical measures of toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Tetrahydrofuran	= 1650 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 14.7 mg/L (Rat) 4 h
Dimethyl ether	-	-	= 164000 ppm (Rat) 4 h
Ethyl cyclohexane	-	> 2000 mg/kg (Rat)	-
Methyl alcohol	= 6200 mg/kg (Rat)	= 15840 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h
Methyl ethyl ketone	= 2483 mg/kg (Rat)	= 5000 mg/kg (Rabbit)	= 11700 ppm (Rat) 4 h

Abbreviations and acronyms

Rat: Rat

Rabbit: Rabbit

Symptoms

Redness. May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Product Information

Ingestion

Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components).

Inhalation

Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May cause drowsiness or dizziness.

Skin contact

Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

Eye contact

Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin corrosion/irritation

Classification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation

Classification based on data available for ingredients. Causes serious eye irritation.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	Japan	IARC
Tetrahydrofuran 109-99-9	2	Group 2B

Legend

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans

Reproductive toxicity Classification based on data available for ingredients. May damage fertility or the unborn child.

STOT - single exposure Based on the classification criteria of the Globally Harmonized System as adopted in the country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). Causes damage to organs if swallowed. May cause respiratory irritation. May cause drowsiness or dizziness.

Causes damage to the following organs: Central nervous system.

May cause damage to the following organs: visual organs, systemic toxicity.

STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Causes damage to the following organs through prolonged or repeated exposure: Central nervous system, liver, Respiratory system.

May cause damage to the following organs through prolonged or repeated exposure: nervous system, visual organs.

12. Ecological information

Ecotoxicity Toxic to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Tetrahydrofuran	-	LC50: 1970 - 2360mg/L (96h, Pimephales promelas) LC50: 2700 - 3600mg/L (96h, Pimephales promelas)	-
Dimethyl ether	-	LC50: >4.1g/L (96h, Poecilia reticulata)	-
Methyl alcohol	-	LC50: =28200mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas) LC50: 19500 - 20700mg/L (96h, Oncorhynchus mykiss) LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss) LC50: 13500 - 17600mg/L (96h, Lepomis macrochirus)	-

Methyl ethyl ketone	-	LC50: 3130 - 3320mg/L (96h, Pimephales promelas)	EC50: >520mg/L (48h, Daphnia magna) EC50: =5091mg/L (48h, Daphnia magna) EC50: 4025 - 6440mg/L (48h, Daphnia magna)
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Percentage for unknown hazards 0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Tetrahydrofuran 109-99-9	0.45
Dimethyl ether 115-10-6	-0.18
Ethyl cyclohexane 1678-91-7	4.56
Methyl alcohol 67-56-1	-0.77
Methyl ethyl ketone 78-93-3	0.3

Mobility in soil No information available.

Hazardous to the ozone layer Classification not possible. Based on available data, the classification criteria are not met.

Other adverse effects No information available.

13. Disposal considerations

Waste from residues/unused products Dispose of in accordance with national, state and local regulations. Consult industrial waste management companies for waste. Do not release this product to natural environment nor reclaim.

Contaminated packaging Dispose containers as same as residual of this product.

14. Transport information

IMDG

UN number or ID number UN1950
UN proper shipping name Aerosols
Description UN1950, Aerosols, 2.1
Transport hazard class(es) 2.1
Marine pollutant P
EmS-No. F-D, S-U
Special Provisions 63,190, 277, 327, 344, 381, 959

ADR

UN number or ID number 1950
UN proper shipping name Aerosols

Description	1950, Aerosols, 2.1, (D)
Transport hazard class(es)	2.1
Environmental hazards	Yes
ERG Code	10L
Special Provisions	190, 327, 344, 625

IATA

UN number or ID number	UN1950
UN proper shipping name	Aerosols, flammable
Description	UN1950, Aerosols, flammable, 2.1
Transport hazard class(es)	2.1
Special Provisions	A145, A167, A802

Japan

UN number or ID number	UN1950
UN proper shipping name	Aerosols
Description	UN1950, Aerosols, 2.1
Transport hazard class(es)	2.1
Special Provisions	63, 190, 327, 344, 959

15. Regulatory information**National regulations****Pollutant Release and Transfer Register (PRTR)**

Applies See section 3 for more information

Industrial Safety and Health Law**Prevention of hazards due to specified chemical substances**

Not applicable

Harmful Substances Requiring Workers to Subject to Medical Exams

Medical Examination - Industrial Safety and Health Law article 66, enforcement order article 22, and the Ordinance on Prevention of Hazards Due to Specified Chemical Substances, Table 5

Ordinance on Prevention of Organic Solvent Poisoning

Organic solvents class 2 - Industrial Safety and Health Law enforcement order Table 6-2 (related to article 6, article 21, article 22, and the Ordinance on Prevention of Organic Solvent Poisoning)

ISHL Notifiable Substances

Article 57-2 of the ISHL, Article 18-2, Item 1, Item 2, Table 9 and Item 3, Table 3 of Order for Enforcement

Harmful substances requiring risk assessment

Article 57-3 of the ISHL

Harmful Substances Whose Names Are to be Indicated on the Label

Article 57 of ISHL, Article 18, Item 1, Item 2, Table 9 and Item 3, Table 3 of Order for Enforcement

Strong mutagenic chemical substances

New chemical substances with mutagenicity recognized (Article 57-3, Paragraph 1 of the Industrial Safety and Health Law).

Corrosive liquid

Corrosive liquids identified in Article 326 of the Ordinance of the Industrial Safety and Health Law which requires an employer to take measures for facilities that use the liquids in pressurized power feeding and through hoses

Poisonous and Deleterious Substances Control Law

Not applicable

Explosives Control Law

No

High Pressure Gas Safety Act

Not applicable

Fire Service Law:

Flammable liquids, group 4, 1st class petroleum, water-insoluble, hazard rank II, 200 liters

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (CSCL)

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed

Chemical name	CAS No.	Chemical Substances Control Law
Tetrahydrofuran	109-99-9	Priority assessment chemical substance

Ship (Marine Transportation) Safety Act

See section 14 for more information

Civil Aeronautics Act

See section 14 for more information

Act on Port Regulation Law

See section 14 for more information

16. Other information

Issuing Date 20-Aug-2021
Revision date 07-Nov-2023

Key or legend to abbreviations and acronyms used in the safety data sheetLegend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	Ceiling	Maximum limit value
*	Skin designation	+	Sensitizers

Key literature references and sources for data used to compile the SDS

JIS Z 7252:2019 Classification of chemicals based on "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)"

JIS Z 7253:2019 Hazard communication of chemicals based on GHS-Labelling and Safety Data Sheet (SDS)

Disclaimer

This SDS complies with the requirements of JIS Z 7252:2019 and JIS Z 7253:2019 (Japan). The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.