

Issuing Date 16-Sep-2021
Revision date 15-Nov-2023
Revision Number 3

1. Identification

Product Name ThreeBond 1501

Details of the supplier of the safety data sheet

Supplier

ThreeBond Fine Chemical Co., Ltd.
1-1 Oyama-cho, Midori-ku, Sagamihara-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 Adhesive, Sealant

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

Flammable liquids	Category 2
Acute toxicity - Oral	Classification not possible
Acute toxicity - Dermal	Classification not possible
Acute toxicity - Inhalation (Gases)	Classification not applicable
Acute toxicity - Inhalation (Vapors)	Category 4
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	Classification not possible
Reproductive toxicity	Category 1A
Effects on or via lactation	Classification not possible
Specific target organ toxicity (single exposure)	Category 1, Category 3
Category 1 Central nervous system.	
Category 3 Target organ effects: Respiratory irritation, Narcotic effects.	
Specific target organ toxicity (repeated exposure)	Category 1
Category 1 Central nervous system, kidneys, nervous system.	
Aspiration hazard	Category 1
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 3

Ozone

Classification not possible

GHS label elements**Signal word**

Danger

Hazard statements

H225 - Highly flammable liquid and vapor

H332 - Harmful if inhaled

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H360 - May damage fertility or the unborn child

H370 - Causes damage to organs

H335 - May cause respiratory irritation

H336 - May cause drowsiness or dizziness

H372 - Causes damage to organs through prolonged or repeated exposure

H401 - Toxic to aquatic life

H412 - Harmful to aquatic life with long lasting effects

H304 - May be fatal if swallowed and enters airways

Causes damage to the following organs: Central nervous system.

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

Precautionary statements**Prevention**

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Wear protective gloves/protective clothing/eye protection/face protection
- Use only outdoors or in a well-ventilated area
- Wash face, hands and any exposed skin thoroughly after handling
- Do not breathe dust/fume/gas/mist/vapors/spray
- Do not eat, drink or smoke when using this product
- 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 container tightly closed
- Use explosion-proof electrical/ ventilating / lighting/ .? / equipment
- Keep cool

Response

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

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: Immediately call a POISON CENTER or doctor
- Do NOT induce vomiting

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

No information available.

3. Composition/information on ingredients

Pure substance/mixture**Mixture**

Chemical name	CAS No.	Weight-%	ENCS Number	ISHL No.
Toluene	108-88-3	61	(3)-2,(3)-60	2-(8)-869
Hexane	110-54-3	16	(2)-6	(2)-6
Rosin	8050-09-7	0.1-<1		
Chloroprene Synthetic rubber, Synthetic resin, Inorganic filler	-	20-<30		

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
Toluene	Toluene			Class I designated chemical substance	1-347	300
Hexane	Hexane			Class I designated chemical substance	1-436	392

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
Toluene	Toluene	108-88-3	
Hexane	Hexane	110-54-3	
Rosin	Rosin	8050-09-7	

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
Toluene	Toluene	108-88-3	
Hexane	Hexane	110-54-3	

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
Toluene	108-88-3	Priority assessment chemical substance
Hexane	110-54-3	Priority assessment chemical substance

4. First-aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
In case of inhalation	May cause allergic respiratory reaction. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Get immediate medical advice/attention. Aspiration into lungs can produce severe lung damage. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur.
In case of skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. If symptoms persist, call a physician.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. If symptoms persist, call a physician. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
In case of ingestion	May produce an allergic reaction. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
Most important symptoms/effects, acute and delayed	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Itching. Rashes. Hives. Difficulty in breathing. Dizziness. 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. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid breathing vapors or mists.
Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

5. Fire-fighting measures

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the	Risk of ignition. Keep product and empty container away from heat and sources of ignition.

chemical	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Product is or contains a sensitizer. May cause sensitization by inhalation. May cause sensitization by skin contact. In the event of fire, cool container with water spray.
Flammable properties	HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Containers may explode when heated. Many liquids are lighter than water.
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). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Avoid breathing vapors or mists.
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. Do not touch or walk through spilled material. 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. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
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. Take equipment measures listed in Section 8. Wear protection gear. Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.
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. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Storage

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. 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 locked up. Keep out of the reach of children. Store away from other materials.

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
Toluene 108-88-3	TWA: 50 ppm TWA: 188 mg/m ³ S*	20 ppm	Ototoxicant - potential to cause hearing disorders TWA: 20 ppm	-	-
Hexane 110-54-3	TWA: 40 ppm TWA: 140 mg/m ³ S*	40 ppm	TWA: 50 ppm S*	-	-
Rosin 8050-09-7	-	-	dermal sensitizer; respiratory sensitizer TWA: 0.001 mg/m ³ total resin acids inhalable particulate matter	-	-

Biological monitoring indicator

Chemical name	Japan Society of Occupational Health	ACGIH
Toluene 108-88-3	0.6 mg/L - blood (Toluene) - within 2 h prior to end of shift at end of work week 0.06 mg/L - urine (Toluene) - within 2 h prior to end of shift at end of work week	0.02 mg/L - blood (Toluene) - prior to last shift of workweek 0.03 mg/L - urine (Toluene) - end of shift 0.3 mg/g creatinine - urine (o-Cresol with hydrolysis) - end of shift
Hexane 110-54-3	3 mg/g creatine - urine (2,5-Hexanedione) - end of shift at end of work week 0.3 mg/g creatine - urine (2,5-Hexanedione) - end of shift at end of work week	0.5 mg/L - urine (2,5-Hexanedione without hydrolysis) - 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.
Hand protection	Wear suitable gloves. Impervious 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.
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	brown
Odor	Solvent odor

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	no data available	
Initial boiling point and boiling range		
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	-20 °C	
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	3.3 Pa·s	
Water solubility	Slightly soluble	
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	0.94	
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	React with strong oxidizing agent. Could cause fire.
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 (dermal)	15,425.50 mg/kg
ATEmix (inhalation-vapor)	14.40 mg/l
ATEmix (inhalation-dust/mist)	12.90 mg/l

Unknown acute toxicity

21.47099 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

Numerical measures of toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Toluene	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
Hexane	= 25 g/kg (Rat)	= 3000 mg/kg (Rabbit)	= 48000 ppm (Rat) 4 h
Rosin	= 7600 mg/kg (Rat)	> 2500 mg/kg (Rabbit)	= 1.5 mg/L (Rat) 4 h

Abbreviations and acronyms

Rat: Rat

Rabbit: Rabbit

Symptoms

Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing. Itching. Rashes. Hives. Difficulty in breathing. Dizziness. 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. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause additional affects as listed under "Inhalation".

Inhalation

Specific test data for the substance or mixture is not available. May cause sensitization in susceptible persons. (based on components). Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. May cause drowsiness or dizziness. Harmful by inhalation.

Skin contact

Repeated exposure may cause skin dryness or cracking. Specific test data for the

substance or mixture is not available. Causes skin irritation. (based on components).
Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
May cause sensitization by skin contact.

Eye contact

Specific test data for the substance or mixture is not available. May cause irritation. 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.

Respiratory or skin sensitization

No data available. May cause an allergic skin reaction.

Carcinogenicity

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

Chemical name	Japan	IARC
Toluene 108-88-3	-	Group 3

Legend**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity

Classification based on data available for ingredients. May damage fertility or the unborn child. May cause harm to breast-fed children.

Target organ effects

Central nervous system. Eyes. kidney. liver. Peripheral Nervous System (PNS). Respiratory system. Skin.

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. May cause respiratory irritation. May cause drowsiness or dizziness.

Causes damage to the following organs: Central nervous system.

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, kidneys, nervous system.

Aspiration hazard

May be fatal if swallowed and enters airways.

12. Ecological information

Ecotoxicity

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Toluene	EC50: >433mg/L (96h, Pseudokirchneriella subcapitata) EC50: =12.5mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 15.22 - 19.05mg/L (96h, Pimephales promelas) LC50: =12.6mg/L (96h, Pimephales promelas) LC50: 5.89 - 7.81mg/L (96h, Oncorhynchus mykiss) LC50: 14.1 - 17.16mg/L (96h, Oncorhynchus mykiss) LC50: =5.8mg/L (96h, Oncorhynchus mykiss) LC50: 11.0 - 15.0mg/L (96h, Lepomis macrochirus) LC50: =54mg/L (96h, Oryzias latipes) LC50: =28.2mg/L (96h, Poecilia reticulata) LC50: 50.87 - 70.34mg/L (96h, Poecilia reticulata)	EC50: 5.46 - 9.83mg/L (48h, Daphnia magna) EC50: =11.5mg/L (48h, Daphnia magna)
Hexane	-	LC50: 2.1 - 2.98mg/L (96h, Pimephales promelas)	-
Rosin	EC50: =400mg/L (72h, Desmodesmus subspicatus)	-	EC50: 3.8 - 5.4mg/L (48h, Daphnia magna)

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
Toluene 108-88-3	2.73
Hexane 110-54-3	4
Rosin 8050-09-7	7.7

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.

Endocrine Disruptor Information**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	UN1133
UN proper shipping name	Adhesives
Description	UN1133, Adhesives (Hexane), 3, II, (-20°C c.c.), Marine pollutant
Transport hazard class(es)	3
Packing group	II
Marine pollutant	NP
EmS-No.	F-E, S-D

ADR

UN number or ID number	UN1133
UN proper shipping name	Adhesives
Description	UN1133, Adhesives, 3, II, (D/E), Environmentally Hazardous
Transport hazard class(es)	3
Packing group	II
ERG Code	3L
Special Provisions	640C

IATA

UN number or ID number	UN1133
UN proper shipping name	Adhesives
Description	UN1133, Adhesives, 3, II
Transport hazard class(es)	3
Packing group	II
Special Provisions	A3
ERG Code	3L

Japan

UN number or ID number	UN1133
UN proper shipping name	Adhesives
Description	UN1133, Adhesives, 3, II
Transport hazard class(es)	3
Packing group	II
Environmental hazard	Yes

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

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
Toluene	108-88-3	Priority assessment chemical substance
Hexane	110-54-3	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 16-Sep-2021

Revision date 15-Nov-2023

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend 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-Labeling 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.