

Issuing Date 15-Sep-2021  
Revision date 14-Nov-2023  
Revision Number 3

## 1. Identification

Product Name PANDO 156A

### 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 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	Yes
Specific target organ toxicity (single exposure)	Category 1, Category 3
Category 1 Central nervous system.	
Category 2 kidneys.	
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 3

Chronic aquatic toxicity	Classification not possible
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  
H362 - May cause harm to breast-fed children  
H335 - May cause respiratory irritation  
H336 - May cause drowsiness or dizziness  
H402 - Harmful to aquatic life  
H304 - May be fatal if swallowed and enters airways  
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: kidneys.  
Causes damage to the following organs through prolonged or repeated exposure: Central nervous system, kidneys, nervous system.

**Precautionary statements****Prevention**

- Do not handle until all safety precautions have been read and understood
- Wear protective gloves/protective clothing/eye protection/face protection
- Do not breathe dust/fume/gas/mist/vapors/spray
- Avoid contact during pregnancy and while nursing
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- 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: 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	15	(3)-2,(3)-60	2-(8)-869
Ethyl acetate	141-78-6	15	(2)-726	(2)-726
Methyl ethyl ketone	78-93-3	50	(2)-542	(2)-542
Polyurethane resin	-	15-<25		

**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

**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	
Ethyl acetate	Ethyl acetate	141-78-6	
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
Toluene	Toluene	108-88-3	
Ethyl acetate	Ethyl acetate	141-78-6	
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
Toluene	108-88-3	Priority assessment chemical substance

**4. First-aid measures**

<b>General advice</b>	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
<b>In case of inhalation</b>	Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur.
<b>In case of skin contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
<b>In case of eye contact</b>	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.
<b>In case of ingestion</b>	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical advice/attention.
<b>Most important symptoms/effects, acute and delayed</b>	Difficulty in breathing. Coughing and/ or wheezing. 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.
<b>Self-protection of the first aider</b>	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 direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists.
<b>Note to physicians</b>	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**

<b>Suitable Extinguishing Media</b>	Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Water spray. Alcohol resistant foam.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	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. In the event of fire, cool container with water spray.
<b>Flammable properties</b>	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. 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. 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**

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 <sup>3</sup> S*	20 ppm	Ototoxicant - potential to cause hearing disorders TWA: 20 ppm	-	-
Ethyl acetate 141-78-6	TWA: 200 ppm TWA: 720 mg/m <sup>3</sup>	200 ppm	TWA: 400 ppm	-	-
Methyl ethyl ketone 78-93-3	TWA: 200 ppm TWA: 590 mg/m <sup>3</sup>	200 ppm	STEL: 300 ppm TWA: 200 ppm	-	-

### 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
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

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	Transparent clear	
Odor	Solvent odor	
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>
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	-1 °C	Cleveland open 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	4.5 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	0.88	
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	
<b>Other information</b>		
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** Heat, flames and sparks.

**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 (inhalation-vapor) 11.00 mg/l  
ATEmix (inhalation-dust/mist) 12.50 mg/l

#### Unknown acute toxicity

19.8996 % 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
Ethyl acetate	= 5620 mg/kg ( Rat )	> 18000 mg/kg ( Rabbit )	= 4000 ppm ( Rat ) 4 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

Difficulty in breathing. Coughing and/ or wheezing. 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.

##### Inhalation

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

##### 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).

##### 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.



**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 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.

**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.

May cause damage to the following organs: kidneys.

**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**

Harmful to aquatic life.

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)	EC50: 5.46 - 9.83mg/L (48h, Daphnia magna) EC50: =11.5mg/L (48h, Daphnia magna)

		latipes) LC50: =28.2mg/L (96h, Poecilia reticulata) LC50: 50.87 - 70.34mg/L (96h, Poecilia reticulata)	
Ethyl acetate	-	LC50: 220 - 250mg/L (96h, Pimephales promelas) LC50: =484mg/L (96h, Oncorhynchus mykiss) LC50: 352 - 500mg/L (96h, Oncorhynchus mykiss)	EC50: =560mg/L (48h, Daphnia magna)
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)

**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
Ethyl acetate 141-78-6	0.73
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 UN1133  
 UN proper shipping name Adhesives  
 Description UN1133 Adhesives, 3, II, (5°C c.c.)  
 Transport hazard class(es) 3  
 Packing group II  
 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)
Transport hazard class(es)	3
Packing group	II
ERG Code	3L

**IATA**

UN number or ID number	UN1133
UN proper shipping name	Adhesives
Description	UN1133 Adhesives, 3, II
Packing group	II
Special Provisions	3A

**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

## 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 petroleums, 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

**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 15-Sep-2021

Revision date 14-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-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.