

**Issuing Date** 20-Aug-2021  
**Revision date** 1-Feb-2024  
**Revision Number** 2.2

## 1. Identification

**Product Name** ThreeBond 1855

### 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** Antirust, lubricant

**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

Acute toxicity - Oral	Classification not possible
Acute toxicity - Dermal	Classification not possible
Acute toxicity - Inhalation (Gases)	Classification not possible
Acute toxicity - Inhalation (Vapors)	Classification not possible
Acute toxicity - Inhalation (Dusts/Mists)	Classification not possible
Skin corrosion/irritation	Classification not possible
Serious eye damage/eye irritation	Classification not possible
Respiratory sensitization	Classification not possible
Skin sensitization	Classification not possible
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Reproductive toxicity	Classification not possible
Effects on or via lactation	Classification not possible
Specific target organ toxicity (single exposure)	Classification not possible
Specific target organ toxicity (repeated exposure)	Classification not possible
Aspiration hazard	Classification not possible
Acute aquatic toxicity	Category 3
Chronic aquatic toxicity	Category 3
Ozone	Classification not possible

### GHS label elements

#### **Hazard statements**

H412 - Harmful to aquatic life with long lasting effects

#### Precautionary statements

##### Prevention

- Avoid release to the environment

##### Response

##### Storage

- Not applicable

##### 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.
Tricresyl phosphate	1330-78-5	0.1-<1	(3)-2522,(3)-2613,(3)-3363	(3)-3363,(3)-2613,(3)-2522
Silicone oil, thickener	-	99-<100		

This product contains  $\geq 0.1$  -  $< 1.0\%$  of substance(s) that are classified for Skin sensitization Category 1/1B.

#### Pollutant Release and Transfer Register (PRTR)

Not applicable

#### 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
Tricresyl phosphate	Phosphoric acid, tritolyl ester	1330-78-5	2024-04-01

##### 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
Tricresyl phosphate	Tritolyl phosphate (except Tri-o-tolyl phosphate)	1330-78-5	2024-04-01

#### Poisonous and Deleterious Substances Control Law

Not applicable

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

Not applicable

### 4. First-aid measures

#### In case of inhalation

Remove to fresh air.

#### In case of skin contact

Wash skin with soap and water.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

	Consult a physician.
In case of ingestion	Clean mouth with water and drink afterwards plenty of water.
Most important symptoms/effects, acute and delayed	No information available.
Note to physicians	Treat symptomatically.

## 5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	No information available.
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	Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.
Environmental precautions	See Section 12 for additional Ecological Information.
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Pick up and transfer to properly labeled containers.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. Handling and storage

### Handling

Advice on safe handling	Take equipment measures listed in Section 8. Wear protection gear.
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### Storage

Storage Conditions	Refer to technical data sheet or material agreement and other documents for storage temperature range.
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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
Tricresyl phosphate 1330-78-5	-	-	-	0.03mg/m <sup>3</sup>	-

**Biological monitoring indicator** Not applicable

**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** 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** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protection apron, protection boots. Wear long sleeve cloth.

**9. Physical and chemical properties****Information on basic physical and chemical properties**

**Physical state** Solid  
**Color** beige  
**Odor** Slight odor

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>Melting point / freezing point</b>	no data available	
<b>Initial boiling point and boiling range</b>		
<b>Flammability</b>	no data available	
<b>Upper/lower flammability or explosive limits</b>		
<b>Upper flammability or explosive limits</b>	no data available	

Lower flammability or explosive limits	no data available
Flash point	100 °C or above
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	no data available
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	0.97
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	No information available.
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****Numerical measures of toxicity - Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Tricresyl phosphate	> 20000 mg/kg ( Rat )	> 10000 mg/kg ( Rabbit )	> 5.2 mg/L ( Rat ) 4 h

**Abbreviations and acronyms**

Rat: Rat

Rabbit: Rabbit

Symptoms	No information available.
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**Product Information**

<b>Ingestion</b>	Specific test data for the substance or mixture is not available.
<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.

**Carcinogenicity**

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

**Legend**

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

**12. Ecological information**

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Tricresyl phosphate	-	LC50: 0.1 - 0.22mg/L (96h, Lepomis macrochirus) LC50: 0.21 - 0.32mg/L (96h, Oncorhynchus mykiss) LC50: 3.3 - 6.2mg/L (96h, Oncorhynchus mykiss) LC50: 20.4 - 41.2mg/L (96h, Lepomis macrochirus) LC50: 3.2 - 10mg/L (96h, Oryzias latipes) LC50: 4.8 - 6.4mg/L (96h, Poecilia reticulata)	-

**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
Tricresyl phosphate 1330-78-5	5.93

**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** Not regulated

**ADR** Not regulated

**IATA** Not regulated

**Japan** Not regulated

### 15. Regulatory information

#### National regulations

##### Pollutant Release and Transfer Register (PRTR)

Not applicable

##### Industrial Safety and Health Law

##### Prevention of hazards due to specified chemical substances

Not applicable

##### Ordinance on Prevention of Organic Solvent Poisoning

Not applicable

##### 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

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##### Poisonous and Deleterious Substances Control Law

Not applicable

##### Explosives Control Law

No

**High Pressure Gas Safety Act**

Not applicable

**Fire Service Law:**

Designated Combustible Substances - Synthetic resins

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

Not applicable

**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** 1-Feb-2024

**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.