

Issue date 16-Nov-2021

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Revision Number 1

## 1. Identification

**Product Name** ThreeBond 6651F

### Recommended use of the chemical and restrictions on use

**Recommended use** Cleaner

### 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)

## 2. Hazard(s) identification

### GHS - Classification

Aerosols	Category 3
Acute toxicity - Oral	Classification not possible
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	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	No effects on or via lactation
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

**Signal word** Warning

#### **Hazard statements**

H412 - Harmful to aquatic life with long lasting effects  
H229 - Pressurized container: May burst if heated

#### **Prevention**

Avoid release to the environment.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Do not pierce or burn, even after use.

#### **Response**

**Storage**

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

**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
Carbon dioxide	124-38-9	1-<5	(1)-169	(1)-169
Fluorine compound	-	90-<99	-	-

**Pollutant Release and Transfer Registry (PRTR)**

Not applicable

**Industrial Safety and Health Law**

ISHL Notifiable Substances

Not applicable

Harmful Substances Whose Names Are to be Indicated on the Label

Not applicable

**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

<b>In case of inhalation</b>	Remove to fresh air.
<b>In case of skin contact</b>	Wash skin with soap and water.
<b>In case of eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>In case of ingestion</b>	Clean mouth with water and drink afterwards plenty of water.
<b>Most important symptoms/effects, acute and delayed</b>	No information available.
<b>Note to physicians</b>	Treat symptomatically.

### 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.

<b>Specific hazards arising from the chemical</b>	No information available.
<b>Flammable properties</b>	Containers may explode when heated.
<b>Special extinguishing media</b>	Cool container with water spray.
<b>Large Fire</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Ensure adequate ventilation.
<b>For emergency responders</b>	Use personal protection recommended in Section 8.
<b>Environmental precautions</b>	See Section 12 for additional Ecological Information.
<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Pick up and transfer to properly labeled containers.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. Handling and storage

### Handling

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

<b>Storage Conditions</b>	Refer to technical data sheet or material agreement and other documents for storage temperature range.
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## 8. Exposure controls/personal protection

<b>Engineering controls</b>	Showers Eyewash stations Ventilation systems.
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### Exposure guidelines

Chemical name	Japan Society of Occupational Health	ISHL Working Environmental Evaluation Standards - Administrative Control Levels	ACGIH TLV
Carbon dioxide 124-38-9	TWA: 5000 ppm TWA: 9000 mg/m <sup>3</sup>	-	STEL: 30000 ppm TWA: 5000 ppm

<b>Biological occupational exposure limits</b>	Not applicable
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<b>Environmental exposure controls</b>	Install local ventilation or seal source of substances. Install safety shower, hand wash, and eye wash station. Clearly indicate the location.
<b><u>Personal protective equipment</u></b>	
<b>Respiratory protection</b>	In case of inadequate ventilation wear respiratory protection.
<b>Hand protection</b>	Wear appropriate protection glove (Made from non-permeable material such as polyethylene, rubber).
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin and body protection</b>	Wear protection apron, protection boots. Wear long sleeve cloth.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	
<b>Color</b>	colorless	
<b>Odor</b>	Solvent 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>Boiling point / boiling range</b>	no data available	
<b>Flammability</b>	no data available	
<b>Upper/lower flammability or explosive limits</b>	no data available	
<b>Upper flammability or explosive limits</b>		
<b>Lower flammability or explosive limits</b>		
<b>Flash point</b>	Not flammable	Tag closed cup
<b>Autoignition temperature</b>	no data available	
<b>Decomposition temperature</b>	no data available	
<b>pH</b>	no data available	
<b>Kinematic viscosity</b>	no data available	
<b>Dynamic viscosity</b>	no data available	
<b>Water solubility</b>	Slightly soluble	
<b>Solubility(ies)</b>	no data available	
<b>Partition Coefficient (n-octanol/water)</b>	no data available	
<b>Vapor pressure</b>	no data available	
<b>Relative vapor density</b>	no data available	
<b>Relative density</b>	1.32	
<b>Particle characteristics</b>		
<b>Particle Size</b>	no data available	
<b>Particle Size Distribution</b>	no data available	

## 10. Stability and reactivity

<b>Stability</b>	It is stable in a cool, dark place in a closed state.
<b>Possibility of hazardous reactions</b>	Toxic gas (HF gas) may be generated by decomposition.
<b>Conditions to avoid</b>	Direct sunlight, Heat, Direct contact with fire.
<b>Incompatible materials</b>	Metal halide, Strong oxidizing agents, Strong reducing agents, Strong oxidants, strong

Lewis acids, strong inorganic acids, strong inorganic bases, organic bases, especially primary and secondary aliphatic amines.

**Hazardous decomposition products.**Hydrogen chloride. Hydrogen fluoride.

## 11. Toxicological information

### Acute toxicity

Classification not possible.

### **Numerical measures of toxicity - Product Information**

No information available

<b>Symptoms</b>	No information available.
<b>Product Information</b>	
<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.
<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met. Classification not possible.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met. Classification not possible.
<b>Respiratory or skin sensitization</b>	Classification not possible.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met. Classification not possible.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met. Classification not possible.
<b>STOT - single exposure</b>	Based on available data, the classification criteria are not met. Classification not possible.
<b>STOT - repeated exposure</b>	Based on available data, the classification criteria are not met. Classification not possible.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met. Classification not possible.

## 12. Ecological information

<b>Ecotoxicity</b>	Classification not possible.
<b>Percentage for unknown hazards</b>	0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.
<b>Persistence and degradability</b>	No information available.
<b>Bioaccumulation</b>	No information available.
<b>Mobility in soil</b>	No information available.
<b>Hazardous to the ozone layer</b>	Classification not possible. Based on available data, the classification criteria are not met.
<b>Other adverse effects</b>	No information available.

### 13. Disposal considerations

<b>Waste from residues/unused products</b>	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.
<b>Contaminated packaging</b>	Dispose containers as same as residual of this product.

### 14. Transport information

#### IMDG

<b>UN number or ID number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols
<b>Description</b>	UN1950, Aerosols, 2.2
<b>Transport hazard class(es)</b>	2.2
<b>Marine pollutant</b>	NP

#### ADR

<b>UN/ID No.</b>	UN1950
<b>Proper shipping name</b>	Aerosols
<b>Description</b>	UN1950, Aerosols, 2.2, (E)
<b>Transport hazard class(es)</b>	2.2
<b>ERG code</b>	10L
<b>Special provisions</b>	327, 625, 344, 190

#### IATA

<b>UN/ID No.</b>	UN1950
<b>Proper shipping name</b>	Aerosols, non-flammable
<b>Description</b>	UN1950, Aerosols, non-flammable, 2.2
<b>Transport hazard class(es)</b>	2.2

#### Japanese regulations

<b>UN Number</b>	UN1950
<b>Proper shipping name</b>	Aerosols
<b>Description</b>	UN1950, Aerosols, 2.2
<b>Hazard class</b>	2.2

### 15. Regulatory information

**National regulations****Pollutant Release and Transfer Registry (PRTR)**

Not applicable

**Industrial Safety and Health Law**

Not applicable

**ISHL Notifiable Substances**

Not applicable

**Poisonous and Deleterious Substances Control Law**

Not applicable

**Explosives Control Law**

Not applicable

**High Pressure Gas Safety Act**

Not applicable

**Fire Service Law:**

Non-hazardous material

**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

**16. Other information****Revision Date**

16-Nov-2021

**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**

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.