

Issue date 17-Mar-2022

Revision Date 17-Mar-2022

Revision Number 1

1. Identification

Product Name ThreeBond 1141G

Recommended use of the chemical and restrictions on use

Recommended use Adhesive, Sealant

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

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	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 1B
Effects on or via lactation	Yes
Specific target organ toxicity (single exposure)	Category 2
Category 2 Central nervous system, visual organs, systemic toxicity.	
Specific target organ toxicity (repeated exposure)	Category 2
Category 2 Central nervous system, visual organs, Respiratory system.	
Aspiration hazard	Classification not possible
Acute aquatic toxicity	Category 3
Chronic aquatic toxicity	Category 3
Ozone	Classification not possible

GHS label elements



Signal word

Danger

Hazard statements

H319 - Causes serious eye irritation

H360 - May damage fertility or the unborn child

H362 - May cause harm to breast-fed children

H371 - May cause damage to organs

H373 - May cause damage to organs through prolonged or repeated exposure

H412 - Harmful to aquatic life with long lasting effects

H371 - May cause damage to the following organs: Central nervous system, visual organs, systemic toxicity.

H373 - May cause damage to the following organs through prolonged or repeated exposure: Central nervous system, visual organs, Respiratory 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.

Do not breathe dust/fume/gas/mist/vapors/spray.

Avoid contact during pregnancy/while nursing.

Wash face, hands and any exposed skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Avoid release to the environment.

Response

IF exposed or concerned: Call a POISON CENTER or doctor.

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

Storage

Store locked up.

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
Titanium dioxide (IV)	13463-67-7	1-<5	(1)-558,(5)-5225	(5)-5225,(1)-558 2-(3)-509
Ethanolamine	141-43-5	0.1-<1	(2)-301	(2)-301
Methyl alcohol	67-56-1	1-<5	(2)-201	(2)-201
Acrylic resin, Water, Inorganic filler	-	90-<99	-	-

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

Pollutant Release and Transfer Registry (PRTR)

Not applicable

Industrial Safety and Health Law

ISHL Notifiable Substances

ISHL Notifiable Substances - information (safety data sheet) to be supplied; Industrial Safety and Health Law enforcement order Table 9 (related to Industrial Safety and Health Law article 57-2 and ISHL Ordinance Article 34-2-4)

Chemical name	CAS No	Category	Ordinance number
Titanium dioxide (IV)	13463-67-7	ISHL Notifiable Substances	191
Ethanolamine	141-43-5	ISHL Notifiable Substances	021
Methyl alcohol	67-56-1	ISHL Notifiable Substances	560

Harmful Substances Whose Names Are to be Indicated on the Label

Harmful Substances - names to be indicated on the label; Industrial Safety and Health Law enforcement order Table 9 (related to

Industrial Safety and Health Law article 57 and ISHL Ordinance Article 33)

Chemical name	CAS No	Category	Ordinance number
Titanium dioxide (IV)	13463-67-7	Harmful Substances Whose Names Are to be Indicated on the Label	191
Methyl alcohol	67-56-1	Harmful Substances Whose Names Are to be Indicated on the Label	560

Poisonous and Deleterious Substances Control Law

Not applicable

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

Priority assessment chemical substance

Chemical name	Chemical Substances Control Law
Methyl alcohol	Priority assessment chemical substance

4. First-aid measures

General advice	Show this safety data sheet to the doctor in attendance.
In case of inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention.
In case of skin contact	Wash off immediately with plenty of water for at least 15 minutes. 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. If symptoms persist, call a physician. 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.
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.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).
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 Large Fire	Cool container with water spray. CAUTION: Use of water spray when fighting fire may be inefficient.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.
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.
Other information	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. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Ensure adequate ventilation.
Hygiene Measures	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

Storage

Storage Conditions	Store locked up. Keep containers tightly closed in a dry, cool and well-ventilated place.
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8. Exposure controls/personal protection

Engineering controls	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
Titanium dioxide (IV) 13463-67-7	TWA: 0.3 mg/m ³	-	TWA: 10 mg/m ³
Ethanolamine 141-43-5	TWA: 3 ppm TWA: 7.5 mg/m ³	-	STEL: 6 ppm TWA: 3 ppm
Methyl alcohol 67-56-1	TWA: 200 ppm TWA: 260 mg/m ³ Skin ISHL/ACL: 200 ppm	200ppm	STEL: 250 ppm TWA: 200 ppm S*

Biological occupational exposure limits

Chemical name	Japan Society of Occupational Health	ACGIH
Methyl alcohol 67-56-1	20 mg/L - urine (Methanol) - end of shift	15 mg/L - urine (Methanol) - end of shift

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.

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Skin and body protection Wear suitable protective clothing.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid	
Color	Gray	
Odor	Slight odor	
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	no data available	
Boiling point / boiling range	no data available	
Flammability	no data available	
Upper/lower flammability or explosive limits	no data available	
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	Not flammable	Cleveland open cup
Autoignition temperature	no data available	
Decomposition temperature	no data available	
pH	9	
Kinematic viscosity	no data available	
Dynamic viscosity	13.5 Pa • s	
Water solubility	Soluble in water	
Solubility(ies)	no data available	
Partition Coefficient (n-octanol/water)	no data available	
Vapor pressure	no data available	
Relative vapor density	no data available	
Relative density	1.26	
Particle characteristics		
Particle Size	no data available	
Particle Size Distribution	no data available	

10. Stability and reactivity

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 No information available.

Hazardous decomposition products. May generate harmful gas by incineration.

11. Toxicological information

Acute toxicity

Classification not possible.

Numerical measures of toxicity - Product Information

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

ATEmix (oral) 6,191.90 mg/kg

ATEmix (inhalation-dust/mist) 6.2042 mg/l

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide (IV)	> 10000 mg/kg (Rat)	-	-
Ethanolamine	= 1720 mg/kg (Rat)	= 1000 mg/kg (Rabbit)	-
Methyl alcohol	= 6200 mg/kg (Rat)	= 15840 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h

Abbreviations and acronyms

Rat: Rat

Rabbit: Rabbit

Symptoms

May cause redness and tearing of the eyes.

Product Information

Ingestion

Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Inhalation

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

Skin contact

Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.

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

Based on available data, the classification criteria are not met. Classification not possible. May cause skin irritation.

Serious eye damage/eye irritation

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

Respiratory or skin sensitization

Classification not possible.

Germ cell mutagenicity

Based on available data, the classification criteria are not met. Classification not possible.

Carcinogenicity

The hazardous substance(s) which is (are) any of the following substances and listed on section 3 is (are) embedded in the product and not available as respirable dusts. When used as intended or as supplied, the product will not pose hazards of the hazardous substance(s). Silica, Quartz, Carbon black, Titanium oxide, Crystalline silica. Based on available data, the classification criteria are not met. Classification not possible.

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

Chemical name	Japan	IARC
Titanium dioxide (IV) 13463-67-7	2	Group 2B

Legend

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Reproductive toxicity

Contains a known or suspected reproductive toxin. 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. Gastrointestinal tract. Lungs. 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). May cause damage to organs. May cause respiratory irritation. May cause drowsiness or dizziness.

H371 - May cause damage to the following organs: Central nervous system, visual organs, systemic toxicity.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

H373 - May cause damage to the following organs through prolonged or repeated exposure: Central nervous system, visual organs, Respiratory system.

Aspiration hazard

Based on available data, the classification criteria are not met. Classification not possible.

12. Ecological information

Ecotoxicity

Harmful to aquatic life.

Percentage for unknown hazards

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Ethanolamine	EC50: =15mg/L (72h, Desmodesmus subspicatus)	LC50: 114 - 196mg/L (96h, Oncorhynchus mykiss) LC50: 300 - 1000mg/L (96h, Lepomis macrochirus) LC50: =227mg/L (96h, Pimephales promelas) LC50: =3684mg/L (96h, Brachydanio rerio) LC50: >200mg/L (96h, Oncorhynchus mykiss)	EC50: =65mg/L (48h, Daphnia magna)
Methyl alcohol	-	LC50: 13500 - 17600mg/L (96h, Lepomis macrochirus) LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss)	-

		LC50: 19500 - 20700mg/L (96h, Oncorhynchus mykiss) LC50: =28200mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas)	
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Persistence and degradability No information available.

Bioaccumulation No data available as this product.

Component Information

Chemical name	Partition coefficient
Ethanolamine 141-43-5	-1.91
Methyl alcohol 67-56-1	-0.77

Mobility

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

Japanese regulations Not regulated

15. Regulatory information

National regulations

Pollutant Release and Transfer Registry (PRTR)

Not applicable

Industrial Safety and Health Law

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ISHL Notifiable Substances

ISHL Notifiable Substances - information (safety data sheet) to be supplied; Industrial Safety and Health Law enforcement

order Table 9 (related to Industrial Safety and Health Law article 57-2 and ISHL Ordinance Article 34-2-4)

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)

Priority assessment chemical substance

Chemical name	CAS No	Chemical Substances Control Law
Methyl alcohol	67-56-1	Priority assessment chemical substance

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

17-Mar-2022

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.