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Version 3

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product name ThreeBond 1211

Recommended use of the chemical and restrictions on use

Recommended use Adhesive, Sealant

Details of the supplier of the safety data sheet

Manufacturer

ThreeBond Fine Chemical Co., Ltd.

Department in charge & Address

Production Engineering Division
1-1 Oyama-cho, Midori-ku
Sagamihara-shi, Kanagawa, Japan

Emergency telephone number

+81-42-774-1333

Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Acute toxicity - Dermal	Category 4
Skin sensitization	Category 1
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Category 2 blood forming system.	

Label elements



Signal word

Warning

Hazard statements

H312 - Harmful in contact with skin

H317 - May cause an allergic skin reaction

H351 - Suspected of causing cancer

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

May cause damage to the following organs through prolonged or repeated exposure: blood forming system.

Precautionary Statements - Prevention

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves
- Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

- IF exposed or concerned: Get medical advice/attention
- For emergency procedures, refer to this SDS.
- IF ON SKIN: Wash with plenty of soap and water
- Call a POISON CENTER or doctor/physician if you feel unwell
- Wash contaminated clothing before reuse
- If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Storage

- Store locked up

Precautionary Statements - Disposal

- Dispose of contents/container to an approved waste disposal plant

Other hazards

- May be harmful if swallowed

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**Single substance or mixture**

Mixture

2-Butanone, oxime; Generated during polymerization reaction.

Effective June 1, 2016, regarding Japan's Industrial Safety and Health Law's "Notifiable Dangerous and Harmful", target substances will be subjected to risk assessment in accordance with Japan's Industrial Safety and Health Law's "Harmful Substances Whose Names Are to be Indicated on the Label."

Chemical name	Weight-%	ENCS	ISHL No.	CAS No.
Silicone resin	80-90	-	-	-
Titanium dioxide (IV)	<2	(5)-5225,(1)-558	-	13463-67-7
Organic tin compound	<1	-	-	-
Toluene	<1	(3)-2	-	108-88-3
Silica	10-20	-	-	-
Methyl ethyl ketone oxime	-	-	-	-

Industrial Safety and Health Law

Law Name	Chemical Name in Regulation	Ordinance Number
Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Attached Table No.9)	Titanium(IV) oxide	191
Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Attached Table No.9)	Silica	312
Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Attached Table No.9)	Tin and its compounds	322
Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Attached Table No.9)	Toluene	407

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc

Law Name	Chemical Name in Regulation	Ordinance Number
Priority Assessment Chemical Substances (Law Article 2, Para.5)	Toluene	46

Section 4: FIRST AID MEASURES**INHALATION**

Remove to fresh air. Seek immediate medical attention/advice.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.

INGESTION

Rinse mouth. Get medical attention.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media	Water spray (fog) Carbon dioxide (CO ₂) Extinguishing powder Alcohol resistant foam Sand
Specific hazards arising from the chemical	May generate irritate, harmful gas.
Special extinguishing media	Wear protection gear and extinguish from windward.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear appropriate protection gear (Refer to Section 8) and avoid eye and skin contact.
Environmental precautions	Keep out of waterways. Avoid release to the environment.
Methods for containment	In case of small spill, absorb the spill in dry sand, soil or cloth and keep in closed container. In case of large spill, surround the spill by bank to prevent from leakage, and collect the spill after it is moved to safety place.
Prevention of secondary hazards	Keep ignition source away from spill.

Section 7: HANDLING AND STORAGE

Handling

Precautions for safe handling

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

Local and general ventilation Take equipment measures listed in Section 8. Wear protection gear.

Storage

Storage conditions Close lid. Avoid direct sun light and ignition source. Keep appropriate temperature.

Material of vessels and packaging Keep this product in original container. Do not put it back in the container.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure guidelines

Chemical name	Japan	ISHL Working Environmental Evaluation Standards - Administrative Control Levels	ACGIH TLV
Titanium dioxide (IV)	TWA: 0.3 mg/m ³	-	TWA: 10 mg/m ³
Toluene	TWA: 50 ppm TWA: 188 mg/m ³ Skin ISHL/ACL: 20 ppm	ISHL/ACL: 20 ppm	TWA: 20 ppm

Engineering 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 appropriate protection glove (Made from non-permeable material such as polyethylene, rubber)
- **Eye/face protection** Wear safety glasses with side shields (or goggles)
- **Skin and body protection** Wear protection apron, protection boots. Wear long sleeve cloth.

Other information Wash hands thoroughly after handling. When using do not eat, drink or smoke.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state Liquid
 Odor Distinct odor
 Color White

Property	Values	Remarks
pH	No data available	
Melting point/freezing point	No data available	
Boiling point / boiling range	No data available	
Flash point	140 °C	
Evaporation rate	No data available	
Flammability (solid, gas)		
Flammability limit in air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Specific gravity	1.01	
Water solubility	Slightly soluble	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	70 Pa·s	

Section 10: STABILITY AND REACTIVITY

Stability Stable under normal conditions.

Possibility of hazardous reactions React with moisture in air. Gradually release hazardous gas.

Conditions to avoid Extreme heat

Incompatible materials Strong oxidizing agents.

Hazardous decomposition products May generate harmful gas by incineration

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

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

Inhalation LC50 No data available as this product.

Numerical measures of toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide (IV)	> 10000 mg/kg (Rat)	-	-
Toluene	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No data available as this product.

Serious eye damage/eye irritation No data available as this product.

Sensitization No data available as this product.

Germ cell mutagenicity No data available as this product.

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

Chemical name	Japan	IARC
Titanium dioxide (IV)	2	Group 2B

Toluene	Group 3
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Reproductive toxicity	No data available as this product.
STOT - single exposure	No data available as this product.
STOT - repeated exposure	No data available as this product.
Aspiration hazard	No data available as this product.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity	
Acute aquatic hazard	No data available as this product.
Chronic aquatic hazard	No data available as this product.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Toluene	433: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 12.5: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static	15.22 - 19.05: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 12.6: 96 h <i>Pimephales promelas</i> mg/L LC50 static 5.89 - 7.81: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 5.8: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static 11.0 - 15.0: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 54: 96 h <i>Oryzias latipes</i> mg/L LC50 static 14.1 - 17.16: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 28.2: 96 h <i>Poecilia reticulata</i> mg/L LC50 semi-static 50.87 - 70.34: 96 h <i>Poecilia reticulata</i> mg/L LC50 static	11.5: 48 h <i>Daphnia magna</i> mg/L EC50 5.46 - 9.83: 48 h <i>Daphnia magna</i> mg/L EC50 Static

Persistence and degradability	No data available as this product.
Bioaccumulation	No data available as this product.
Mobility in soil	No data available as this product.
Endocrine disruptor information	No data available as this product.

Section 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.

Section 14: TRANSPORT INFORMATION

IMDG Not regulated

ICAO/IATA (air) Not regulated

ADR Not regulated

Japanese regulations

Marine Transportation Safety Act Not applicable

Civil Aeronautics Act Not applicable

Section 15: REGULATORY INFORMATION

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Fire protection law criteria Group 4 - Petroleums - 3rd Class(not Water solubility)

Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc Priority Assessment Chemical Substances (Law Article 2, Para.5)

Industrial Safety and Health Law Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Attached Table No.9)

Section 16: OTHER INFORMATION

Issue date 23-Mar-2015

Other information Please contact to local sales offices for further information.

Disclaimer

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