

Issue date 20-Jan-2017

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Version 1

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product name ThreeBond 1521C

Recommended use of the chemical and restrictions on use

Recommended use Adhesive, Sealant

Details of the supplier of the safety data sheet

Manufacturer

ThreeBond Singapore Pte.Ltd.

Department in charge & Address

Australia Branch
 Factory : 2/38 Jellico dve Scoresby
 3179 Melbourne Victory Australia
 Tel : 61-3-9753-2522
 Fax : 61-3-9753-2566

Emergency telephone number

Tel : 0417-350-027 (Mr.Wesley Mallett)

Section 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Flammable liquids	Category 2
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2B
Reproductive Toxicity	Category 1A
Specific target organ toxicity (single exposure)	Category 1
Category 1 Central nervous system	
Category 3 Respiratory irritation, Narcotic effects.	
Specific target organ toxicity (repeated exposure)	Category 1
Category 1 Central nervous system, kidneys	
Aspiration toxicity	Category 1
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 3

Label elements



Signal word

Danger

Hazard statements

H225 - Highly flammable liquid and vapor
 H304 - May be fatal if swallowed and enters airways
 H315 - Causes skin irritation
 H320 - Causes eye irritation
 H332 - Harmful if inhaled
 H360 - May damage fertility or the unborn child
 H370 - Causes damage to organs
 H372 - Causes damage to organs through prolonged or repeated exposure
 H401 - Toxic to aquatic life
 H412 - Harmful to aquatic life with long lasting effects
 H335 - May cause respiratory irritation

H336 - May cause drowsiness or dizziness

Causes damage to the following organs: Central nervous system.

Causes damage to the following organs through prolonged or repeated exposure: Central nervous system, kidneys.

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
- Use only outdoors or in a well-ventilated area
- Wash face, hands and any exposed skin thoroughly after handling
- Do not breathe dust/fume/gas/mist/vapors/spray
- Do not eat, drink or smoke when using this product
- Avoid release to the environment.
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting/equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge

Precautionary Statements - Response

- For first aid procedure, refer to this SDS.
- IF exposed: Call a POISON CENTER or doctor/physician
- IF IN 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
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- Wash contaminated clothing before reuse
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Do NOT induce vomiting
- In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

- Store locked up
- Store in a well-ventilated place. Keep cool

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

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.
Toluene	39	(3)-2	-	108-88-3
Carbon black	<1	(5)-5222,(5)-3328	-	1333-86-4
Chloroprene Synthetic rubber, Synthetic resin, Inorganic filler	55-65	-	-	-

Pollution Release and Transfer Registry

Class	Chemical Name in Regulation	(Metal Name)	Ordinance Number
First Class Designated Chemical Substances (Law Art. 2-2, Enforcement Order Art. 1 Attached Table No.1)	Toluene	-	300

Industrial Safety and Health Law

Law Name	Chemical Name in Regulation	Ordinance Number
Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57, Para.1, Enforcement Order Art.18 Item 1, Item 2, Attached Table No.9)	Toluene	23
Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Item 1, Item 2, Attached Table No.9)	Carbon black	130
Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Item 1, Item 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	Move victim to fresh air If breathing is irregular or stopped, administer artificial respiration Administer oxygen if breathing is difficult
Skin contact	Wash skin with soap and water
Eye contact	In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes
Ingestion	Rinse mouth. Get medical attention.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Note to physicians	Keep victim warm and quiet.

Section 5: FIRE FIGHTING MEASURES

Flammable properties HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Containers may

	explode when heated. Many liquids are lighter than water.
Suitable extinguishing media	Dry chemical, CO ₂ , water spray or regular foam Water spray, fog or regular foam Use water spray or fog; do not use straight streams
Unsuitable extinguishing media	CAUTION: All these products have a very low flash point. Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air Vapors may travel to source of ignition and flash back Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks) Vapor explosion hazard indoors, outdoors or in sewers Those substances designated with a "P" may polymerize explosively when heated or involved in a fire Runoff to sewer may create fire or explosion hazard Substance may be transported hot
Special extinguishing media	Wear protection gear and extinguish from windward.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) All equipment used when handling the product must be grounded Do not touch or walk through spilled material Stop leak if you can do it without risk
Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas
Methods for containment	A vapor suppressing foam may be used to reduce vapors Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers
Methods for cleaning up	Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for later disposal.
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
Toluene	TWA: 50 ppm TWA: 188 mg/m ³ Skin ISHL/ACL: 20 ppm	ISHL/ACL: 20 ppm	TWA: 20 ppm
Carbon black	TWA: 4 mg/m ³ TWA: 1 mg/m ³	-	TWA: 3 mg/m ³ inhalable fraction

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	Paste
Odor	Solvent odor
Color	Black
Property	Values
pH	No data available
Melting point/freezing point	No data available
Boiling point / boiling range	110 °C or above
Flash point	9.5 °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	1.15
Water solubility	Slightly soluble
Autoignition temperature	No data available
Decomposition temperature	No data available
Dynamic viscosity	130 Pa·s

Remarks

Section 10: STABILITY AND REACTIVITY

Stability Stable under normal conditions.

Possibility of hazardous reactions React with strong acid. Could cause fire.

Conditions to avoid 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
Toluene	= 2600 mg/kg (Rat)	= 12000 mg/kg (Rabbit)	= 12.5 mg/L (Rat) 4 h
Carbon black	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-

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
Toluene		Group 3
Carbon black	2	Group 2B

*IARC (International Agency for Research on Cancer)
 Group 2B - Possibly Carcinogenic to Humans
 Not classifiable as a human carcinogen*

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.

Target organ effects Central nervous system, Eyes, kidney, liver, Respiratory system, Skin.

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.

Ecotoxicity Toxic to aquatic life Harmful to aquatic life with long lasting effects

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 11.0 - 15.0: 96 h <i>Lepomis macrochirus</i>	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

		mg/L LC50 static 14.1 - 17.16: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 50.87 - 70.34: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 54: 96 h <i>Oryzias latipes</i> mg/L LC50 static 28.2: 96 h <i>Poecilia reticulata</i> mg/L LC50 semi-static 5.8: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 semi-static	
Carbon black	-	-	>5600: 24 h <i>Daphnia magna</i> mg/L EC50

Persistence and degradability No data available as this product.

Bioaccumulation
 No data available as this product.
 Component Information

Chemical name	Partition coefficient
Toluene	2.7

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

UN/ID No. UN1133
 Proper shipping name Adhesives
 Hazard class 3
 Packing group III
 EmS-No F-E, S-D

ICAO/IATA (air)

UN/ID No. UN1133
 Proper shipping name Adhesives
 Hazard class 3
 Packing group III

ADR

UN/ID No. UN1133
 Proper shipping name Adhesives
 Hazard class 3
 Packing group III
 ERG code 3L

Japanese regulations

UN Number UN1133
 Proper shipping name Adhesives
 Hazard class 3
 Packing group III

Marine Transportation Safety Act	Flammable Liquids (Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Ordinance Art.3, Attached Table 1)
Civil Aeronautics Act	Flammable Liquids (MITL Notification for Air Transportation of Explosives etc., Ordinance Art.194, Attached Table 1)

Section 15: REGULATORY INFORMATION

<u>Fire protection law criteria</u>	Group 2 - Flammable solids
<u>Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc</u>	Priority Assessment Chemical Substances (Law Article 2, Para.5)
<u>Industrial Safety and Health Law</u>	Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57, Para.1, Enforcement Order Art.18 Item 1, Item 2, Attached Table No.9) Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Item 1, Item 2, Attached Table No.9)
<u>Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof</u>	First Class Designated Chemical Substances (Law Art. 2-2, Enforcement Order Art. 1 Attached Table No.1)
<u>Other information</u>	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."

Section 16: OTHER INFORMATION

Issue date	20-Jan-2017
Other information	Please contact to local sales offices for further information.

Disclaimer

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