ThreeBond

SAFETY DATA SHEET

ThreeBond 1530C

JIS Z 7253:2019

1. Product and company identification

Product name : ThreeBond 1530C

Supplier's details : 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)

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Adhesive, Sealant

Uses advised against : 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. Hazards identification

GHS Classification : ACUTE TOXICITY (oral) - Category 4
CARCINOGENICITY - Category 1A
HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 3
HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 3

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 95.5%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 95.5%

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H302 - Harmful if swallowed.
H350 - May cause cancer.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves, protective clothing and eye or face protection.
P273 - Avoid release to the environment.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash face, hands and any exposed skin thoroughly after handling

Response : P308 + P313 - IF exposed or concerned: Get medical advice or attention.
P301 + P312, P330 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.

Storage : P405 - Store locked up.

2. Hazards identification

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number	Official Gazette notice reference number	
			CSCL	ISHL
Reaction product of bis(acetyloxy)(dibutyl) stannane and tetraethoxysilane	≤10	CAS: 93925-42-9	Not available.	Not available.
Phosphoric acid, tris(2-ethylhexyl) ester	≤10	CAS: 78-42-2	2-2000; 2-2014	Not available.
Crystalline - Quartz	≤10	CAS: 14808-60-7	1-548	(1)-548

Chemical information : Methanol; Generated during polymerization reaction.

Pollutant Release and Transfer Registers (PRTR)

Ingredient name	%	Measured as	Status	Control number
Tris(2-ethylhexyl) phosphate	1.7		Class 1	458

Chemicals requiring notification

Ingredient name	%	Status	Reference number
Tin and its compounds	≤10	Listed	322
Tin and its compounds(2025-04)	≤10	Listed	15(2025-04)
Tris(2-ethylhexyl) phosphate(2026-04)	≤10	Listed	2-2260 (2026-04)
Crystalline silica	≤10	Listed	165-2

Substance(s) requiring labelling

Ingredient name	%	Status	Reference number
Tin and its compounds	≤10	Listed	322
Tin and its compounds(2025-04)	≤10	Listed	15(2025-04)
Tris(2-ethylhexyl) phosphate(2026-04)	≤10	Listed	2-2260 (2026-04)
Crystalline silica	≤10	Listed	165-2

Carcinogens based on Article 577-2 of the Ordinance on ISH

Ingredient name	%	Status	Reference number
Crystalline silica	0.39	Listed	165-2

4. First aid measures

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

4. First aid measures

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Ingestion : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Ingestion : Harmful if swallowed.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5. Fire-fighting measures

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6. Accidental release measures

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

7. Handling and storage

Handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Storage

Conditions for safe storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

8. Exposure controls/personal protection

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Occupational exposure limits

Biological exposure indices

No exposure indices known.

Individual protection measures

Respiratory protection : Self-contained breathing apparatus.

8. Exposure controls/personal protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.

Color : Translucent.

Odor : Characteristic.

pH : Not available.

Melting point/freezing point : Not available.

Boiling point or initial boiling point and boiling range : Not available.

Flash point : Open cup: 245°C (473°F) [Cleveland]

Flammability : Not available.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : Not available.

Relative vapor density : Not available.

Relative density : 1.31

Solubility(ies) : Not available.

Miscible with water : No.

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Dynamic: 100 Pa·s

Particle characteristics

Median particle size : Not applicable.

10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Acute toxicity

Product/ingredient name	Result
tris(2-ethylhexyl) phosphate	**Rabbit - Dermal - LD50** 20000 mg/kg **Rat - Oral - LD50** >36800 mg/kg

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
ThreeBond 1530C	1331.0	N/A	N/A	N/A	N/A
silicic acid (H4SiO4), tetraethyl ester, reaction products with bis(acetyloxy)dibutylstannane	500	N/A	N/A	N/A	N/A
tris(2-ethylhexyl) phosphate	N/A	20000	N/A	N/A	N/A

Conclusion/Summary [Product] : Not available.

Skin corrosion/irritation

Product/ingredient name	Result
tris(2-ethylhexyl) phosphate	**Rabbit - Skin - Moderate irritant** Amount/concentration applied: 250 mg

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name	Result
tris(2-ethylhexyl) phosphate	**Rabbit - Eyes - Mild irritant** Amount/concentration applied: 500 mg **Rabbit - Eyes - Moderate irritant** Amount/concentration applied: 0.1 Ml

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

11. Toxicological information

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Result
crystalline silica (quartz)	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (immune system, kidneys, respiratory organs) - Category 1

Aspiration hazard

Not available.

12. Ecological information

Ecotoxicity

Product/ingredient name	Result
tris(2-ethylhexyl) phosphate	**Chronic - NOEC - Fresh water** Fish - Chinese Rare Minnow - *Gobiocypris rarus* Age: 6 months; Size: 43.8 mm; Weight: 835.1 mg 111.9 µg/l [30 days] Effect: Growth

Conclusion/Summary [Product]: Not available.

12. Ecological information

Persistence and degradability

Not available.

Conclusion/Summary [Product]: Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
tris(2-ethylhexyl) phosphate	-	9.2 to 22	Low

Mobility in soil

Soil/Water partition coefficient : Not available.

Hazardous to the ozone layer

Not applicable.

Other adverse effects

No known significant effects or critical hazards.

13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

	UN	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14. Transport information

Transport in bulk according to IMO instruments : Not available.

15. Regulatory information

Fire Service Law

Class	Product name/Property	Hazard category	Precautionary statement	Designated quantity
Category IV	Class IV petroleums	III	Not available.	6000 L

Industrial Safety and Health Act

Ordinance on the Prevention of the Hazard due to Specified Chemical Substances

None of the components are listed.

Organic solvents poisoning prevention : Not applicable.

Chemicals requiring notification

Ingredient name	%	Status	Reference number
Tin and its compounds	≤10	Listed	322
Tin and its compounds(2025-04)	≤10	Listed	15(2025-04)
Tris(2-ethylhexyl) phosphate(2026-04)	≤10	Listed	2-2260 (2026-04)
Crystalline silica	≤10	Listed	165-2

Substance(s) requiring labelling

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Crystalline silica	≤10	Listed	165-2

Chemical substances that cause skin disorders, etc. and other chemical substances that must be handled with impermeable protective equipment etc. based on special chemical regulations. (Article 594-2 Paragraph 1 of Ordinance on ISH)

None of the components are listed.

Carcinogens based on Article 577-2 of the Ordinance on ISH

Ingredient name	%	Status	Reference number
Crystalline silica	0.39	Listed	165-2

Carcinogens based on Paragraph 3, Article 28 of the Law

None of the components are listed.

Mutagen

None of the components are listed.

Chemical Substances Control Law (CSCL)

None of the components are listed.

Poisonous and Deleterious Substances

None of the components are listed.

15. Regulatory information

Pollutant Release and Transfer Registers (PRTR)

Ingredient name	%	Measured as	Status	Control number
Tris(2-ethylhexyl) phosphate	1.7		Class 1	458

JSOH Carcinogen : Group 1

Explosives Control Law : Not applicable.

High Pressure Gas Control Law : Not applicable.

Ship Safety Law : See section 14 for more information.

Civil Aeronautics Law : See section 14 for more information.

Act on Port Regulation Law : See section 14 for more information.

16. Other information

History

Date of issue/Date of revision : 2025/03/31

Version : 1

Key to abbreviations :
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (oral) - Category 4	Calculation method
CARCINOGENICITY - Category 1A	Calculation method
HAZARDOUS TO THE AQUATIC ENVIRONMENT - ACUTE HAZARD - Category 3	Calculation method
HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD - Category 3	Calculation method

References : 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).

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.