ThreeBond

SAFETY DATA SHEET

This safety data sheet complies with the requirements of:
JIS Z 7253:2019

Issuing Date 15-Jul-2021
Revision date 20-Feb-2023
Revision Number 2

1. Identification

Product Name ThreeBond 1530B

Details of the supplier of the safety data sheet

Supplier
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)

Recommended use of the chemical and restrictions on use

Recommended use Adhesive, Sealant

Restrictions on use
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. 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	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	Classification not possible
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 2
Chronic aquatic toxicity	Category 2
Ozone	Classification not possible

GHS label elements

Hazard statements
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements
Prevention
• Avoid release to the environment

Response

• Collect spillage
Storage
• Not applicable
Disposal
• Dispose of contents/container to an approved waste disposal plant

Other hazards

May be harmful in contact with skin. Causes mild skin irritation.

3. Composition/information on ingredients

Pure substance/mixture Mixture

Chemical nature Methanol; Generated during polymerization reaction.

Chemical name	CAS No	Weight-%	ENCS Number	ISHL No
Carbon black	1333-86-4	0.1-<1	-	(5)-5222,(5)-3328
Methyl alcohol	67-56-1	-	(2)-201	(2)-201
Tris(2-ethylhexyl)phosphate	78-42-2	8.4	(2)-2000	(2)-2000
Organic tin compound	-	1-<5		
Silyl-terminated resin	-	45-<55		
Inorganic filler	-	30-<40		

This product contains ≥1.0 - <10% of substance (s) that are classified for Specific target organ toxicity (repeated exposure) Category 2.

Until March 31, 2023 Pollutant Release and Transfer Register (PRTR)
The amount of the relevant substance in certain cases referenced in article 4(i)(a) or 4(i)(b) of the Enforcement Order of the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Act) is calculated based on the conversion factors shown (with safety factor = 1 in cases where conversion factor information is not available)

Class I designated chemical substance	Weight-%
Tin organic compounds, as Sn	0.56

Chemical name	Cabinet order name	Metal, CN, F, etc	Conversion coefficient	Content rate %	Category	Ordinance number	Control number
*	Phosphoric Acid, Tris(2-Ethylhexyl) Ester			8.4	Class I designated chemical substance	1-458	458

***** Refer to Cabinet order name

After April 1, 2023 Pollutant Release and Transfer Register (PRTR)
The amount of the relevant substance in certain cases referenced in article 4(i)(a) or 4(i)(b) of the Enforcement Order of the Act on

Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (PRTR Act) is calculated based on the conversion factors shown (with safety factor = 1 in cases where conversion factor information is not available)

Class I designated chemical substance	Weight-%
Tin organic compounds, as Sn	2.5

Chemical name	Cabinet order name	Metal, CN, F, etc	Conversion coefficient	Content rate %	Category	Ordinance number	Control number
*	Phosphoric Acid, Tris(2-Ethylhexyl) Ester			8.4	Class I designated chemical substance	1-511	458

***** Refer to Cabinet order name

Industrial Safety and Health Law

ISHL Notifiable Substances

Article 57-2 of the ISHL, Article 18-2, Item 1, Item 2, Table 9 and Item 3, Table 3 of Order for Enforcement

Chemical name	CAS No	Category	Ordinance number
Carbon black	1333-86-4	ISHL Notifiable Substances	Attached table 9-130
Organic tin compound	-	ISHL Notifiable Substances	Attached table 9-322

Harmful Substances Whose Names Are to be Indicated on the Label

Article 57 of ISHL, Article 18, Item 1, Item 2, Table 9 and Item 3, Table 3 of Order for Enforcement

Chemical name	CAS No	Category	Ordinance number
Organic tin compound	-	Harmful Substances Whose Names Are to be Indicated on the Label	Attached table 9-322

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

General advice Show this safety data sheet to the doctor in attendance.

In case of inhalation Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.

In case of skin contact Wash skin with soap and water.

In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

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. Get medical attention.

Most important symptoms/effects, acute and delayed Coughing and/ or wheezing. Difficulty in breathing.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.

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.
Flammable properties	Containers may explode when heated.
Special Extinguishing Media	Cool container with water spray.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
Other information	CAUTION: Use of water spray when fighting fire may be inefficient.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Avoid breathing vapors or mists. Use personal protective equipment as required.
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 breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product.
Hygiene Measures	Do not eat, drink or smoke when using this product.

Storage

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. Exposure controls/personal protection

Exposure guidelines

Chemical name	Japan Society of Occupational Health	ISHL Working Environmental Evaluation Standards - Administrative Control Levels	ACGIH TLV
Carbon black	TWA: 4 mg/m^3	-	TWA: 3 mg/m^3 inhalable

1333-86-4	TWA: 1 mg/m³		particulate matter
Methyl alcohol 67-56-1	TWA: 200 ppm TWA: 260 mg/m³ S*	200 ppm	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

Engineering controls Showers
Eyewash stations
Ventilation systems.

Environmental exposure controls Install safety shower, hand wash, and eye wash station. Clearly indicate the location. Install local ventilation or seal source of substances.

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.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Color	Black
Odor	Distinct odor

Property	**Values**	**Remarks • Method**
Melting point / freezing point	no data available	
Initial boiling point and boiling range	Not available	
Flammability	no data available	
Upper/lower flammability or explosive limits		
Upper flammability or explosive limits	no data available	
Lower flammability or explosive limits	no data available	
Flash point	Not flammable	
Evaporation rate	no data available	
Autoignition temperature	no data available	
Decomposition temperature	no data available	
pH	no data available	
Viscosity		
Kinematic viscosity		
Dynamic viscosity	120 Pa•s	
Water solubility	Slightly soluble	
Solubility(ies)	no data available	
Partition Coefficient (n-octanol/water)	no data available	
Vapor pressure	no data available	

Density and/or relative density

Relative density	1.31
Liquid Density	no data available
Bulk density	no data available
Relative vapor density	no data available
Particle characteristics	
Particle Size	no data available
Particle Size Distribution	no data available

Other information

Explosive properties	no data available
Oxidizing properties	no data available

10. Stability and reactivity

Chemical stability Stable under normal conditions.

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

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

Numerical measures of toxicity - Product Information

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

ATEmix (oral)	7,936.10 mg/kg
ATEmix (dermal)	2,590.90 mg/kg
ATEmix (inhalation-vapor)	21.80 mg/l

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Carbon black	> 15400 mg/kg (Rat)	-	> 4.6 mg/m³ (Rat) 4 h
Methyl alcohol	= 6200 mg/kg (Rat)	= 15840 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h
Tris(2-ethylhexyl)phosphate	= 37 g/kg (Rat)	> 20000 mg/kg (Rabbit)	> 447 mg/m³ (Rat) 4 h

Abbreviations and acronyms
Rat: Rat
Rabbit: Rabbit

Symptoms Coughing and/ or wheezing.

Product Information

Ingestion Specific test data for the substance or mixture is not available.

Inhalation Specific test data for the substance or mixture is not available. Harmful by inhalation. (based on components).

Skin contact May be harmful in contact with skin. Causes mild skin irritation.

Eye contact Specific test data for the substance or mixture is not available.

Skin corrosion/irritation Based on available data, the classification criteria are not met. Classification not possible.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met. Classification not possible.

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
Carbon black 1333-86-4	2	Group 2B

Legend

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
Group 3 - Not Classifiable as to Carcinogenicity in Humans

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

STOT - single exposure Based on available data, the classification criteria are not met. Classification not possible.

STOT - repeated exposure 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, Crystalline silica. Based on available data, the classification criteria are not met. Classification not possible.

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

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Methyl alcohol	-	LC50: =28200mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas)	-

		LC50: 19500 - 20700mg/L (96h, Oncorhynchus mykiss) LC50: 18 - 20mL/L (96h, Oncorhynchus mykiss) LC50: 13500 - 17600mg/L (96h, Lepomis macrochirus)	

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

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Methyl alcohol 67-56-1	-0.77
Tris(2-ethylhexyl)phosphate 78-42-2	6.26

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 managent 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

UN number or ID number UN3082
UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.
Description UN3082, Environmentally hazardous substance, liquid, n.o.s., 9, III, Marine pollutant
Transport hazard class(es) 9
Packing group III
Marine pollutant P
EmS-No F-A, S-F
Special Provisions 274, 335, 969

ADR

UN number or ID number 3082
UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.
Description 3082, Environmentally hazardous substance, liquid, n.o.s., 9, III, (-)
Transport hazard class(es) 9
Packing group III
ERG Code 9L
Special Provisions 274, 335, 601, 375

IATA

UN number or ID number UN3082
UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Description	UN3082, Environmentally hazardous substance, liquid, n.o.s., 9, III
Transport hazard class(es)	9
Packing group	III
Special Provisions	A97, A158, A197

Japan

UN number or ID number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s., 9, III
Transport hazard class(es)	9
Packing group	III
Special Provisions	274, 335

15. Regulatory information

National regulations

Until March 31, 2023 Pollutant Release and Transfer Register (PRTR)
Applies See section 3 for more information
After April 1, 2023 Pollutant Release and Transfer Register (PRTR)
Applies See section 3 for more information

Industrial Safety and Health Law

Harmful Substances Whose Names Are to be Indicated on the Label
Article 57 of ISHL, Article 18, Item 1, Item 2, Table 9 and Item 3, Table 3 of Order for Enforcement
ISHL Notifiable Substances
Article 57-2 of the ISHL, Article 18-2, Item 1, Item 2, Table 9 and Item 3, Table 3 of Order for Enforcement

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
Act on Port Regulation Law
See section 14 for more information

16. Other information

Issuing Date	15-Jul-2021
Revision date	20-Feb-2023

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 used to compile the SDS
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.