

Safety Data Sheet

Issued Date: July 10, 2008
Revised Date: January 06, 2014

1. IDENTIFICATION

PRODUCT NAME	ThreeBond 1102
ISSUED NUMBER	kenkyukanri 59-9
NAME OF MANUFACTURER	ThreeBond Fine Chemical Co.,Ltd.
ADDRESS	1-1 Oyama-cho, Midori-ku, Sagami-hara-shi, Kanagawa, Japan
NAME OF SECTION	R&D Administration Department, Technical Service Division, R&D Group
TEL / FAX NUMBER	81-42-703-7126/81-42-771-7391
EMERGENCY TEL NUMBER	81-42-703-7126
RECOMMENDED USE AND RESTRICTION ON USE	Adhesive and sealant

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

PHYSICAL HAZARDS	Flammable liquids	Category 2
HEALTH HAZARDS	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 after single exposure	Category 1 (Nervous system)
	after single exposure	Category 2 (Kidney)
	after single exposure	Category 3 (Irritates respiratory organ)
	after repeated exposure	Category 1 (Nervous system, Liver, Kidney)
ENVIRONMENTAL HAZARDS	Acute hazards to the aquatic environment	Category 3

*Not above mentioned hazard classification items; Not classified or Not classifiable.

LABEL ELEMENTS

SYMBOL



SIGNAL WORD

Danger

HAZARD STATEMENT

H225 Highly flammable liquid and vapor
H332 Harmful if inhaled
H315 Causes skin irritation
H320 Causes eye irritation
H360 May damage fertility or the unborn child
H370 Causes damage to organs; Nervous system
H371 May cause damage to organs; Kidney
H335 May cause respiratory irritation
H336 May cause drowsiness or dizziness
H372 Causes damage to organs through prolonged or repeated exposure;
Nervous system, Liver, Kidney
H402 Harmful to aquatic life

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NOTICE

SAFETY MEASURE

Keep away from heat, sparks, open flames or other ignition source. -No smoking

Wear appropriate chemical protectors; gloves, glasses when handling

Avoid release to the environment.

Use personal protection and ventilation equipment to avoid exposure, if necessary.

FIRST-AID MEASURE

If you feel unwell, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If on skin: Wash with plenty of soap and water. Remove contaminated clothing.

If skin irritation or rash occurs: Get medical advice, attention.

If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice, attention.

STORAGE

Keep container tightly closed. Protect from direct sunlight. Store the product at moderate temperature.

DISPOSAL

Dispose by qualified waste disposal experts.

GHS Hazard Communication is mentioned in accordance with Japanese Law.

3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE

Mixture

CHEMICAL COMPOSITION

INGREDIENTS

	Wt%	Formula	CAS Number
Alkyd resin, Inorganic filler	40 - 50	-	-
Aluminum oxide	1 - 10	Al ₂ O ₃	1344-28-1
Toluene	16	C ₇ H ₈	108-88-3
Isopropyl alcohol	1 - 10	CH ₃ CH(OH)CH ₃	67-63-0
Ammonium hydride	< 1	-	1336-21-6
Silica	20 - 30	SiO ₂	-

IMPURITIES AND STABILIZING ADDITIVES WHICH ARE THEMSELVES CLASSIFIED AND WHICH CONTRIBUTE TO THE CLASSIFICATION OF THE SUBSTANCE

No information

4. FIRST-AID MEASURES

IF INHALED

In case of poisoning, remove victim to fresh air, calm down, keep warm then get medical advice, attention.

IF ON SKIN

Wash soap and water. Remove contaminated clothing.

If skin irritation or rash occurs: get medical advice, attention.

IF IN EYES

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing, then get medical advice, attention.

IF SWALLOWED

Rinse mouth.

Get medical advice, attention.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry powder, alcohol-resistant foam and carbon dioxide extinguisher, dry sand, water spray

SPECIFIC HAZARDS

May produce poisonous and irritated gasses upon a fire.

SPECIFIC FIRE-FIGHTING MEASURES

Workers should wear appropriate protection (safety glasses, protective clothes, mask for organic poisonous gasses, etc.), then extinguish from up wind position.

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6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Wear appropriate protective equipment (refer to 8. Exposure Control/Personal Protection) to avoid contact to eyes, skin and inhalation.

ENVIRONMENTAL PRECAUTIONS, RECOVERY/NEUTRALIZATION

Caution not to allow product flow into rivers and not to effect to environment.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

In case of a small spill, absorb with dry sand, soil, sawdust, cloth, etc., then place in a sealable container.

In case of large spills, dike and prevent overflow. Guide to a safe place then dispose properly.

SECONDARY ACCIDENT PREVENTION MEASURE

All ignition sources should be quickly removed. (No smoking in vicinity, prohibit sparks or fire sources)

7. HANDLING AND STORAGE

HANDLING

ENGINEERING MEASURES

Wear protective equipment. Perform engineering measures in accordance with 「8. Exposure Control / Personal Protection」.

LOCAL VENTILATION /GENERAL VENTILATION

Perform local and general ventilation in accordance with 「8. Exposure Control/Personal Protection」.

SAFETY HANDLING PRECAUTIONS

Fire strictly prohibited

STORAGE

ENGINEERING MEASURES

Keep container tightly closed. Protect from direct sunlight. Store the product moderate temperature.

Refer to the technical data, specifications, and a product label about handling range of temperature.

CONTAINER AND PACKAGING MATERIALS

Keep only in original container. Do not transfer the product to another bottle.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS

	ACGIH TLV	OSHA PEL
Aluminum oxide	10 mg/m ³	10 mg/m ³ (total dust)
Toluene	50 ppm	100 ppm
Isopropyl alcohol	200 ppm	200 ppm
Ammonium hydride	Not established	Not established
Silica	Not established	Not established

ENGINEERING MEASURES

If handling this product indoors, seal off sources or use a local mechanical ventilation system, etc.

Place a safety shower, hand washing sink and an eye wash shower near work area with clearly markings.

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PERSONAL PROTECTION EQUIPMENT

RESPIRATORY PROTECTION	Wear mask to prevent organic gas poisoning, if necessary.
HAND PROTECTION	Wear appropriate protective gloves (Polyethylene, rubber, etc., solvent impervious materials).
EYE PROTECTION	Use eye protection. (preferably goggles)
SKIN AND BODY PROTECTION	Wear personal protection apron, boots, if necessary. Do not work with short sleeve shirts.
SANITARY MEASURES	Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE

APPEARANCE	Liquid
COLOR	Yellow
ODOR	Solvent odor
BOILING POINT (INITIAL AND RANGE)	Over 80°C
FLASHPOINT	5°C
SPECIFIC GRAVITY (DENSITY)	1.33
SOLUBILITY	Part of soluble in water
VISCOSITY	6.9 Pa·s

PHYSICAL STATE as Aluminum oxide

MELTING POINT/FREEZING POINT	1999 °C – 2032 °C(α-Alumina)
SOLUBILITY	Insoluble in water

PHYSICAL STATE as Toluene

MELTING POINT/FREEZING POINT	-95°C
BOILING POINT (INITIAL AND RANGE)	111°C
FLASHPOINT	4.4 °C(Closed), 7.2 °C(Open)
SPECIFIC GRAVITY (DENSITY)	0.87(20 °C)
SOLUBILITY	Insoluble in water, Soluble in Ethanol, Ether, Acetone, Benzene

PHYSICAL STATE as Isopropyl alcohol

BOILING POINT (INITIAL BOILING POINT)	82.4°C
SPECIFIC GRAVITY (DENSITY)	0.79(20 °C)
SOLUBILITY	Readily soluble in water, Hydrocarbon, Organic solvent

PHYSICAL STATE as Ammonium hydride

SPECIFIC GRAVITY (DENSITY)	0.96(15 °C)
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PHYSICAL STATE as Silica

MELTING POINT/FREEZING POINT	1710 °C, 1600–1750 °C(Sublimation at 1750 °C)
BOILING POINT (INITIAL AND RANGE)	2230°C
SPECIFIC GRAVITY (DENSITY)	2.65(20°C)
SOLUBILITY	Water: 0.2g(100ml, 3N Ammonia water, 18 °C) Slightly soluble in water

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10. STABILITY AND REACTIVITY

STABILITY	Stable in normal handling..
POSSIBLY HAZARDOUS REACTION	Reacts to strong oxidizers, then may cause a fire hazard.
CONDITION TO AVOID	Heating.
INCOMPATIBLE MATERIALS	Strong oxidizer.
HAZARDOUS DECOMPOSITION	Incineration may produce poisonous gasses (Carbon monoxide, Low molecule organic compounds, etc.) upon condition.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS

ACUTE TOXICITY	No data as product
SKIN CORROSION/IRRITATION	No data as product

Information on GHS Hazard Communication is in accordance with Japanese Law

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS

HAZARDS TO THE AQUATIC ENVIRONMENT	No data as product
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ECOTOXICITY	No data
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Information on GHS Hazard Communication is in accordance with Japanese Law

13. DISPOSAL CONSIDERATIONS

METHOD OF DISPOSAL	To dispose product, solicit waste disposal management experts. Do not discharge waste nor cleaning agents containing this product into rivers, etc. And do not bury or landfill as is. Handle in used container and cloth same as above.
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14. TRANSPORT INFORMATION

INTERNATIONAL REGULATION

SEA TRANSPORTATION	In accordance with IMO regulations
UN number	1133
Proper shipping name	Adhesives
UN Classification	3
UN packing group	III

AIR TRANSPORTATION	In accordance with ICAO/IATA regulations
UN number	1133
Proper shipping name	Adhesives
UN Classification	3
UN packing group	III

JAPAN DOMESTIC REGULATION

LAND TRANSPORTATION	In accordance with Japanese Law
SEA TRANSPORTATION	In accordance with Japanese Law
UN number	1133
Proper shipping name	Adhesives
UN Classification	3
UN packing group	III
AIR TRANSPORTATION	In accordance with Japanese Law
UN number	1133
Proper shipping name	Adhesives
UN Classification	3
UN packing group	III

EMERGENCY ACCIDENTAL MEASURE

Yellow card number	128
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15. REGULATORY INFORMATION

Handle in accordance with applicable laws and regulations.

16. OTHER INFORMATION

Portions of the above evaluation of dangerous and harmful effects may be insufficient, please perform adequate investigation.

The content in this report is based on information which was available as of the Effective date.
But Three Bond Co., Ltd. and its affiliates are not responsible for guaranteeing the above data and evaluations.

The above data assumes usage under normal working conditions.

In case of special handling is required, please handle with suitable safety measures according to the application and usage.

The content in this report may change due to new evaluation and tests, etc.

In case there are differences in the translation, the Japanese language version takes precedence.