

Safety Data Sheet

Issued Date: November 06, 2008

Revised Date: February 24, 2010

1. IDENTIFICATION

PRODUCT NAME	ThreeBond 2222P
ISSUED NUMBER	kenkyukanri 752-5
ISSUED NUMBER	Three Bond Co.,Ltd
NAME OF MANUFACTURER	1456, Hazama-cho, Hachioji-shi, Tokyo, Japan
ADDRESS	Administration Department Research Division
NAME OF SECTION	81-42-661-1367/81-42-669-7235
TEL / FAX NUMBER	81-42-661-1367
EMERGENCY TEL NUMBER	Adhesive and sealant

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

PHYSICAL HAZARDS	Flammable liquids	Not classified
ENVIRONMENTAL HAZARDS	Acute hazards to the aquatic environment	Category 2
	Chronic hazards to the aquatic environment	Category 2

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

LABEL ELEMENTS

SYMBOL



H401 Toxic to aquatic life
H411 Toxic to aquatic life with long lasting effects

NOTICE

SAFETY MEASURE

Wear appropriate chemical protectors; gloves, glasses when handling
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
Bisphenol F type epoxy resin, liquid	40 - 50	-	-
Modified aliphatic polyamine, Other hardener, Filler	50 - 60	-	-
Silica	< 1	SiO ₂	-

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

No information

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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 IN EYES

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

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.

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

Take precautions against fire

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.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS

	ACGIH TLV	OSHA PEL
Bisphenol F type epoxy resin,liquid	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.

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
COLOUR	Black — Japanese
FLASHPOINT	None flammable
SPECIFIC GRAVITY (DENSITY)	1.56
SOLUBILITY	Slightly soluble in water
VISCOSITY	45 Pa·s

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

10. STABILITY AND REACTIVITY

STABILITY	Reacts upon high temperature.
POSSIBLY HAZARDOUS REACTION	Suddenly reacts with strong oxidizers, strong inorganic bases. When hardening in large quantity, product may generate a great deal of heat. During sudden hardening a harmful gas is produced; may cause carbonization or decomposition.
CONDITION TO AVOID	High temperature during storage.
INCOMPATIBLE MATERIALS	Oxidizer, Inorganic bases.
HAZARDOUS DECOMPOSITION	Incineration may produce poisonous gasses (Carbon monoxide, Ammonia, Cyanide gas, NOx, etc.) upon condition.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS

ACUTE TOXICITY	No data as product
SKIN CORROSION/IRRITATION	No data as product but causes skin and mucous membrane irritation

Information on GHS Hazard Communication is in accordance with Japanese Law

12. ECOLOGICAL INFORMATION

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ENVIRONMENTAL HAZARDS

HAZARDS TO THE AQUATIC ENVIRONMENT No data as product

MOBILITY No data

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.

14.TRANSPORT INFORMATION

INTERNATIONAL REGULATION

SEA TRANSPORTATION In accordance with IMO regulations
UN number 3082
Proper shipping name Environmentally hazardous substance, liquid, n. o. s.
UN Classification 9
UN packing group III
Marine pollutant P

AIR TRANSPORTATION In accordance with ICAO/IATA regulations
UN number 3082
Proper shipping name Environmentally hazardous substance, liquid, n. o. s.
UN Classification 9
UN packing group III

DOMESTIC REGULATION

SEA TRANSPORTATION In accordance with Japanese Law
UN number 3082
Proper shipping name Environmentally hazardous substance, liquid, n. o. s.
UN Classification 9
UN packing group III
Marine pollutant P

AIR TRANSPORTATION In accordance with Japanese Law
UN number 3082
Proper shipping name Environmentally hazardous substance, liquid, n. o. s.
UN Classification 9
UN packing group III

EMERGENCY ACCIDENTAL MEASURE

Yellow card number 171

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.