

Issued Date: Revised Date:

Not classified

Category 2 Category 2B

Category 1

Category 2

October 28, 2008 July 07, 2011

1. IDENTIFICATION

PRODUCT NAME

ISSUED NUMBER

NAME OF MANUFACTURER

ADDRESS

NAME OF SECTION

TEL / FAX NUMBER

EMERGENCY TEL NUMBER

RECOMMENDED USE AND RESTRICTION ON USE

ThreeBond 2082C Base resin

kenkyukanri 467-6

Three Bond Co., Ltd.

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Administration Department Research Division

81-42-661-1367/81-42-669-7235

81-42-661-1367

Adhesive and sealant

2. HAZARDS IDENTIFICATION

ENVIRONMENTAL HAZARDS

GHS CLASSIFICATION

PHYSICAL HAZARDS

HEALTH HAZARDS

RDS

Flammable liquids

Skin corrosion/irritation

Serious eye damage/Eye irritation

Skin sensitization

Acute hazards to the aquatic environment

Acute nazards to the aquatic environment

Chronic hazards to the aquatic environment Category 2

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

LABEL ELEMENTS

SYMBOL



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SIGNAL WORD

Warning

HAZARD STATEMENT

H315 Causes skin irritation H320 Causes eye irritation

H317 May cause an allergic skin reaction

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.

Avoid release to the environment.

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.



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3. COMPOSITION / INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE

Mixture

CHEMICAL COMPOSITION

INGREDIENTS

Wt% Formula > 90

CAS Number

Bisphenol A type epoxy resin, liquid, Bisphenol

F type epoxy resin, liquid

Organic filler

5 - 15

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 rush 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.

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 \(\gamma \). Exposure Control \(/ \) Personal Protection \(\].

LOCAL VENTILATION /GENERAL VENTILATION Perform local and general ventilation in accordance with \(\gamma \) 8. Exposure

Control/Personal Protection I.

SAFETY HANDLING **PRECAUTIONS**

Fire strictly prohibited

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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

Bisphenol A type epoxy resin, liquid Bisphenol F type epoxy resin, liquid Not established

Not established

ENGINEERING MEASURES

Not established Not established

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 COLOR

Liquid White

ODOR FLASHPOINT Slight odor 268°C

SPECIFIC GRAVITY (DENSITY)

1.17

SOLUBILITY

Slightly soluble in water

VISCOSITY 15 Pa·s

10. STABILITY AND REACTIVITY

STABILITY

Stable in normal handling..

POSSIBLY HAZARDOUS REACTION

Reacts violently with strong oxidizers, strong Lewis acids, strong inorganic

acids, strong inorganic bases, organic bases (especially aliphatic amines

class 1&2), then may cause a fire.

CONDITION TO AVOID

When mixing a large quantities of base resin and hardener at once, it also generates a great deal of heat as well as a rapid curing reaction. Harmful

gas is produced and may cause carbonization or decomposition.

INCOMPATIBLE MATERIALS

Oxidizer, Inorganic bases.

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 but

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No data as product but causes skin and mucous membrane irritation

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12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS

HAZARDS TO THE AQUATIC

No data as product

ENVIRONMENT

ECOTOXICITY No data

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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 II
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

JAPAN DOMESTIC REGULATION

LAND TRANSPORTATION In accordance with Japanese Law 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.