

Safety Data Sheet

Effective date: April 12, 2010

Print date: February 10th, 2011

1. CHEMICAL NAME AND COMPANY NAME

CHEMICAL PRODUCT NAME Three Bond 2089
Base Resin for Two Component Epoxy Adhesive

NAME OF MANUFACTURER Three Bond Co. Ltd
International Operations Division
1456, Hazama-cho, Hachioji-shi, Tokyo Japan

AUSTRALIA BRANCH: 2 / 38 JELICO DR, SCORESBY, VIC 3179 PHONE NO: 03 9753 2522 FAX: 03 9753 2566
AUSTRALIA MANAGER: WESLEY MALLETT AFTER HOURS CONTACT NI: 0417 350 027

2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE/MIXTURE	Mixture
COMPOSITION	Wt%
Bisphenol A type epoxy resin	24
Metallic powder	10 ~ 20
Inorganic fillers, Silane coupling agent	<u>55 ~ 65</u>
Total	100

3. HAZARDS IDENTIFICATION

CLASSIFICATION

UN Classification Not applicable
UN Number Not applicable

PHYSICAL AND CHEMICAL HAZARDS

Slightly flammable

ADVERSE HUMAN HEALTH EFFECTS

This product contains Bisphenol epoxy resin, an irritant, hence, it may irritate skin and inflammation may occur.

4. FIRST AID MEASURES

EYE CONTACT

Flush eyes with water for at least 15 minutes. Then immediately consult eye physician.

SKIN CONTACT

Immediately remove contaminated clothes, shoes, etc. Wash off well with soap and water.

If skin appears unusual or pain persists, immediately consult physician.

INHALATION

Move to fresh air. Immediately seek medical treatment.

INGESTION

Rinse mouth well in water. Then, seek medical treatment at once.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry powder, CO₂, foam.

SPECIFIC HAZARDS WITH REGARD TO FIRE-FIGHTING MEASURES

No known hazards at this moment.

SPECIFIC METHODS/PROTECTION OF FIRE FIGHTERS

In case of a small fire, absorb with dry sand, soil, sawdust, cloth, etc

In case of a large fire, use foam extinguisher to remove air

6. ACCIDENTAL RELEASE MEASURES

Wear protective equipment. Avoid contact and inhalation. Ignition sources should be quickly removed.

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 and then dispose properly.

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7. HANDLING AND STORAGE

HANDLING

- Do not handle near fire, static electricity, sparks or other sources of ignition.
- Avoid contact with eye, skin, mucous membrane and clothes
- To prevent contact and inhalation, wear appropriate protective equipment.
- After handling, wash hand and face well.

STORAGE

- Avoid direct sunlight and in addition to the above, keep away high temperature materials.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

CONTROL PARAMETERS

PEL, Singapore 1997

	Long term	Short term
Bisphenol A type epoxy resin ppm	Not established	Not established

ENGINEERING MEASURES

If handling this product in an enclosed area, use a closed circulating mechanical ventilation system. Place clearly marked safety shower, hand washing sink and eye bath near work area.

PERSONAL PROTECTION EQUIPMENT

RESPIRATORY PROTECTION

Mask which shields organic gas.

EYE PROTECTION

Goggles.

HAND, SKIN AND BODY PROTECTION

Wear solvent resistant or other impervious gloves. Wear apron, boots, etc., as appropriate.

Do not work with short sleeve shirt.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE, COLOUR, ODOUR, PHYSICAL STATE	Grey paste
SPECIFIC GRAVITY	2.05
SOLUBILITY IN WATER	Insoluble

10. PHYSICAL HAZARD (STABILITY AND REACTIVITY)

FLASHPOINT	100°C
AUTOIGNITION TEMPERATURE	Over 200°C.
EXPLOSION LIMIT	No data available at this time

Decomposition materials: Carbon dioxide, aldehyde, acid and organic substances. Reactivity: Strong oxidizers, strong lewis acids, strong inorganic acids, strong inorganic bases. (Especially, aliphatic amine class 1 & 2). Heat is generated during hardening and sudden hardening may produce harmful gases. Reactive materials may cause carbonisation

11. TOXICOLOGICAL INFORMATION

No data available at this time.

12. ECOLOGICAL CONSIDERATIONS

No data available at this time.

13. DISPOSAL CONSIDERATIONS

To dispose as industrial waste and request a certified waste treatment company to handle. Incineration may produce poisonous gases for example carbon monoxide, ammonia. When disposing waste liquids, mixing epoxy resin with other materials may cause chemical reaction and combustion. Handle in accordance with 7. Handling and Storage.

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14. **TRANSPORT INFORMATION**

See 7. Handling and Storage.

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 contents in this report are based on information, which were available as of the effective date, but Three Bond Singapore Pte 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 special handling is required, please handle with suitable safety measures according to the application and usage.
- The contents in this report may change due to new evaluation and tests etc.