ThreeBond 1207C Issued Date: July 16, 2008 Revised Date: November 18, 2008
Three Bond Co.,Ltd. Kenkyukanri 81-3 Print Date: February 17, 2009

1. INFORMATION ON PRODUCTS AND SUPPLIER

PRODUCT NAME

ISSUED NUMBER

NAME OF MANUFACTURER

Three Bond 1207C

Kenkyukanri 81-3

Three Bond Co.,Ltd.

ADDRESS 1456, Hazama-cho, Hachioji-shi, Tokyo, Japan NAME OF SECTION Administrative Department Research Division

TEL / FAX NUMBER 81-426-61-1367/81-426-69-7235

EMERGENCY TEL NUMBER 81-42-661-1367
RECOMMENDED USE AND RESTRICTION ON USE Adhesive and Sealant

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION

PHYSICAL HAZARDS

Flammable liquid Category 3

HEALTH HAZARDS

Skin corrosion/irritation Category 3
Eye damage/irritation Category 2A
Reproductive toxicity Category 2

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

LABEL ELEMENTS

SYMBOL







SIGNAL WORD

Warning

HAZARD STATEMENT

Flammable liquid and vapor
Causes mild skin irritation
Causes eye serious irritation

Suspected of damaging fertility or the unborn child

NOTICE

SAFETY MEASURE

Keep away from heat, spark, flame or other sources of ignition. -No smoking

Wear appropriate chemical protectors; gloves, glasses when handling.

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

FIRST AID MEASURE

When feeling is disorder, move to fresh air place, calm down, in a pose breathing easily.

Skin contact: Wash off with soap and plenty of water. Remove contaminated clothes.

If skin appears inflammation or eruption, consult physician and seek medical treatment.

Eye contact: Wash eyes carefully with water for a few minutes.

A pair of contact lenses put off, if easy to take it off, after continue to wash, then consult eye physician and seek medical treatment.

STORAGE

Close a container cap tightly, avoid direct sunlight, and store the product moderate temperature. DISPOSAL $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \int_{-\infty}^{\infty$

Solicit waste disposal management 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% **CAS Number Formula** Silica 50 - 60 SiO2 Iron oxide < 2 Fe2O3 1309-37-1 40 - 50 Silicone resin Acetone Cracked gas СН3СОН3 67-64-1

IMPURITIES AND STABILIZING ADDITIVES WHICH ARE THEMSELVES CLASSIFIED

AND WHICH CONTRIBUTE TO THE CLASSIFICATION OF THE SUBSTANCE No information

4. FIRST AID MEASURES

INHALATION

In case of poisoning, move victim to fresh air place, calm down then seek medical consult and treatment. **SKIN CONTACT**

Wash off well with soap and water.

If skin appears inflammation or eruption, seek medical consult and treatment.

EYE CONTACT

Wash eyes with water a few minutes.

A pair of contact lenses put off, if easy to take it off, after continue to wash.

If eyes irritate persist, consult an eye physician and seek medical treatment.

Consult a physician and seek medical treatment.

INGESTION

Rinse mouth well with water. Immediately seek medical consult and treatment.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry powder, carbon dioxide gas, Dry sand, Foam of resistant alcohol, Spray water

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

May produce poisonous and irritated gasses upon a fire

SPECIFIC FIRE FIGHTING MEASURES

Workers should wear appropriate protectors (glasses, cloths, mask for poisonous gasses, etc.) then extinguish should be performed up wind.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS. PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Wear appropriate protection 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 PRIVENTION MEASURE

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

7. HANDLING AND STORAGE

HANDLING

ENGINEERING MEASURES

Wear protection equipment; perform engineering measures written in \(\grace 8\). Exposure Control/Personal Protection 1.

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LOCAL VENTILATION/TOTAL VENTILATION

Perform local and total ventilation written in \(\sigma \) 8. Exposure Control/Personal Protection 1.

SAFETY HANDLING PRECAUTIONS

Use of fire strictly prohibited

STORAGE

Silica

ENGINEERING MEASURES

Close a container cap tightly, avoid direct sunlight, and store the product moderate temperature.

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

CONTAINER AND PACKAGEING MATERIALS

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

8. EXPOSURE CONTROL / PERSONAL PROTECTION

CONTROL PARAMETERS

ACGIH TLV OSHA PEL Not established Not established

10 mg/m3(total particulate) Iron oxide 5 mg/m3

Acetone 500 ppm 750 ppm

ENGINEERING MEASURES

If handling this product in a closed workshop, a generating sources are enclosed, or countermeasure to use a local mechanical ventilation system, etc.

Place a safety shower, hand washing sink and an eye bath near work area and clearly marked.

PERSONAL PROTECTION EQUIPMENT

RESPIRATORY PROTECTION

Mask to prevent organic gas poisoning, if necessary.

HAND PROTECTION

Wear appropriate a protection gloves (Polyethylene, rubber, etc., solvent impervious materials).

EYE PROTECTION

Protection glasses (Goggles as better)

SKIN AND BODY PROTECTION

Wear personal protection apron, boots, if necessary. Do not work with short sleeve shirts.

SANITARY MEASURES

Wash hands well after handling. No eating, drinking and no smoking, when handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE as Product

APPEARANCE Paste

COLOUR Reddish brown **ODOR** Specific smell 25 °C

FLASHPOINT Over 250 °C **AUTOIGNITION TEMPERATURE**

SPECIFIC GRAVITY (DENSITY) 1.50

Slightly soluble SOLUBILITY IN WATER VISCOSITY 70 Pa·s

PHYSICAL STATE as Silica

MELTING POINT/FREEZING POINT 1710 °C, 1600-1750 °C(Sublimation at 1750 °C)

2230 °C **BOILING POINT(INITIAL AND RANGE)** SPECIFIC GRAVITY (DENSITY) 2.65(20 °C)

Water: 0.2g(100ml, 3N Ammonia water, 18 °C) SOLUBILITY

Slightly soluble in water

PHYSICAL STATE as Iron oxide

1550 °C MELTING POINT/FREEZING POINT

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SPECIFIC GRAVITY (DENSITY) 5.1 - 5.2

SOLUBILITY Slowly soluble in acid

Difficult to soluble in acid(Intensity heating)

PHYSICAL STATE as Acetone

MELTING POINT/FREEZING POINT -94.6 °C **BOILING POINT(INITIAL AND RANGE)** 56.5 °C -20 °C **FLASHPOINT**

VAPOR PRESSURE 180.3 mmHg(20 °C)

SPECIFIC GRAVITY (DENSITY) 0.79(20 °C)

SOLUBILITY Readily soluble in water, Alcohol, Ether

Slightly soluble in Chloroform

10. STABILITY AND REACTIVITY

STABILITY Stable in normal handling.

POSSIBLY HAZARDOUS REACTION Reacts to air moisture, slowly generates Acetone

CONDITION TO AVOID Intensive heating INCOMPATIBLE MATERIALS Strong oxidizer

HAZARDOUS DECOMPOSITION Incineration may produce poisonous gasses (Carbon monoxide, 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

ECOLOGICAL TOXICITY 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.

Prohibited that to dispose the waste or waste liquid containing the product in the river, etc.,

to reclaim, to dump the product as it is. Handle in used container and cloth same as above.

14. TRANSPORT INFORMATION

INTERNATIONAL REGULATION

SEA TRANSPOTATION Follows IMO regulation **UN number** 1133 Proper shipping name **Adhesives**

UN Classification 3 **UN packing group** ${\rm I\hspace{-.1em}I\hspace{-.1em}I}$

Marine pollutant (chemicals name) Not applicable AIR TRANSPOTATION Follows ICAO/IATA regulation

1133 **UN number** Proper shipping name Adhesives

UN Classification 3 UN packing group ${\rm I\hspace{-.1em}I\hspace{-.1em}I}$

DOMESTIC REGULATION

LAND TRANSPOTATION **Follows Japanese Law**

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SEA TRANSPOTATION Follows Japanese Law
UN number 1133
Proper shipping name
UN Classification 3

UN packing group

AIR TRANSPOTATION

UN number

Proper shipping name

UN packing group

Follows Japanese Law

1133

Adhesives

UN Classification 3 UN packing group Ⅲ EMARGENCY ACCIDENTAL MEASURE Yellow card number 128

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.