KSCD No.:101045-01

PFIA1002ZA for KX-FA83,KX-FA84,KX-FL511,KX-FL541, KX-FL611, KX-FL613 Kao Corporation

Set Up Data June 23' 2003

MATERIAL SAFTY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PFIA1002ZA for KX-FA83,KX-FA84,KX-FL511,KX-FL541

SUPPLIER: Kao Corporation

ADDRESS: 1-3,Bunka,2-chome,Sumida-ku,Tokyo 131-8501 Japan

DIVISION: Chemical Division

TELEPHON NUMBER: 81-3-5630-7700

FAX NUMBER: 81-3-5630-9889

EMERGENCY TELEPHON NUMBER: 81-3-5630-7700

2. COMPOSITION/INFORMATION ON INGREDIENT

SUBSTANCE OR PREPARATION: Preparation

INGREDIENTS AND

CONCENTRATION RANGE

Ingredients Concentration Range(%) CAS RN

Black toner

INGREDIENTS CONTRIBUTING TO

THE HAZARD(JAPAN)

None

3. HAZARDS IDENTIFICATION

MOST IMPORTANT HAZARDS:

ADVERSE HUMAN HEALTH

EFFECT To the best of our investigation, no

special hazards have to be mentioned.

ENVIRONMENTAL EFFCTS: To the best of our investigation no information

available

PHYSICAL AND CHEMICAL HAZARDS: This material is not dangerous in case

of usual handling.

May cause risk of dust explosion.

CLASS NAME FOR MSDS IN Not applicable JAPAN

4. FIRST-AID MEASURES

IN CASE OF INHALATION: Remove person to fresh air.

If necessary seek medical attention.

IN CASE OF SKIN CONTACT: Wash material off the skin with plenty of water and soap.

If necessary seek medical attention.

IN CASE OF EYE CONTCT: Immediately hold eyelids open and flush with a stream of water for at least 15 minutes. If necessary seek medical attention.

IN CASE OF INGESTION: Seek medical attention. Never give anything by mouth to an unconscious person.

If possible, rinse out mouth and give one or two glasses of water or milk to drink.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Water spray, powder

NOT SUITABLE EXTINGUISHG MEDIA: No information available

SPECIFIC HAZARDS: May produce irritating or toxic gases in afire.

SPECIFIC METHOD: Keep away from sources of ignition and use appropriate use extinguishing media.

Fight fire from upwind position if possible.

PROTECTION OF FIREFIGHTERS: Use goggles in combination with dust mask, and another protections as appropriate to situation.

6.ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS : Use mask, goggles and protective gloves.

Large spills: Remove person to safety.

Ensure adequate ventilation.

Treat from upwind position.

ENVIRONMENTAL PRECAUTIONS: Do not discharge into the drains, surface or ground water directly.

METHODS FOR CLEANIG UP: Sweep or vacuum spills.

Prevent dispersion of dust.

PREVENTION OF SECONDARY HAZARDS: No information available.

7.HANDLING AND STORAGE

HANDLING

TECHNICAL MEASURES: Facilities storing utilizing this material should be equipped with an eyewash facility and a safety shower.

PRECAUTIONS: Avoid inhalation of fine dust.

SAFE HANDLING ADVICE: Handle in well-ventilated areas.

Use safety glasses and protective gloves as appropriate to situation.

Wash hands and face and gargle after handling.

STORAGE

STORAGE CONDITIONS: Keep container tightly closed.

Protect from sun.

Store in a well-ventilated room (under 40).

PACKAGING MATERIALS: No information available.

8.EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES: Facilities strong or utilizing this material should be equipped with an eyewash facility and a safety shower.

Use an adequate ventilation.

LIMIT VALUES

ACGIH(TLV): TWA 3.5mg/m3, (2000 year edition)

Carbon black

OSHA(PEL): PEL 3.5mg/m3, (2000 year edition)

Carbon black

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: Use dust mask, as appropriate to situation.

HAND PROTECTION: Rubber gloves

EYE PROTECTION: Safety glasses with side shield.

(Safety goggles or Face shield)

SKIN AND BODY PROTECTION: Full-body suit HYGIENE MEASURES: No information available

9.PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATES

FORM: Pulverizing powder

COLOUR : Black
ODOUR : Odourless
PH : Not applicable

SPECIFIC TEMPERATURES/TEMPERATURE RANGES AT WHICH CHANGES

IN PHYSICAL STATE OCCUR

BOILING POINT : No data available MELTING POINT : No data available

DECOMPOSITION TEMPERATURE: No data available

FLASH POINT: No data available

AUTOIGNITION TEMPERTURE: No data available

EXPLOSION PROPERTIES

EXPLOSION: UPPER LIMIT No data available

LOWER LIMIT No data available

VAPOUR PRESSURE : No data available VAPOUR DENSITY : No data available DENSITY : 1.2 g/mL (20) (68F)

SOLUBILITY

WATER SOLUBILITY: Insoluble

 $SOLVENT\ SOLUBILITY: Partially\ soluble\ in\ toluene,\ chloroform,\ and$

tetrahydrofurane.

OCTANOL/WATER PARTITION COEFFICIENT: No data available

OTHER DATE: No data available

10. STABILITY AND REACTIVITY

STABILITY: Stable in general

HAZARDOUS REACTIONS: Stable

CONDITIONS TO AVOID: No information available MATERIALS TO AVOID: No information available

HAZARDOUS DECOMPOSITION PRODUCT: No information available

OTHERS: No information available

11. TOXICOLOGIAL INFORMATION

ACUTE TOXICITY: No information available

LOCAL EFFECTS:

CORROSIVITY: No information available

SKIN IRRITATION: No information available

EYE IRRITATION: No information available

SENSITIZATION: No information available

CHRONIC TOXICITY/LONG TERM TOXICITY: No information available

CARCINOGENICITY: No information available

IARC: Group 2B (2000 year edition)

Carbon black

Group 3 (2000 year edition)

Silica, amorphous

NTP: Not established

OSHA: Not established

MUTAGENICITY: No information available

TERATOGENICITY: No information available

REPRODUCATION TOXCITY: No information available

OTHER DATA: No information available

12. ECOLOGICAL INFORMATION

MOBILTY: No information available

PERSISTENCE/DEGRADABILITY: No information available

BIOACCUMULATION: No information available

ECOTOXICITY:

AQUATIC TOXICITY: No information available

OTHER DATA: No information available

13. DISPOSAL CONSIDERRATIONS

Review "HANDLING AND STORAGE (Section 7)"

Dispose of waste (after vacuuming) in accordance with local, state, and federal regulations.

Dispose of waste in accordance with local, sate, and federal regulations.

14. TRANSPORT INFORMATION

Follow all regulations in your country or region

UN CLASS/UN NUMBER: Not applicable

PRECAUTIONS: Review "ACCIDENTAL RELEASE MEASURES (Section 6)".

Review "HANDLING AND STORAGE (Section 7)"

Ensure containers without breakage or leaking.

Ensure containers tightly fixed.

Follow all regulations in your country or region.

15. REGULATORY INFORMATION

Fellow all regulations in your country or region

INVETORIES : ENCS (Japan) Yes

TSCA(USA) Yes

EINECS(EU) No(ELINCS)

AICS(Australia) Yes

DSL(Canada) No(NDSL)

ECL(Korea) Yes

PICCS(Philippines) Yes

KAO Corporation is not able to check up the regulation in regard to the substances in your country or region, therefore, we request this matter would be filled by your responsibility.

16. OTHER INFORMATION

REFERENCE : Safety data sheet for chemical products-Part 1: Content and

order of section (ISO 11014-1)

International Chemicals Safety Cards(ICSC) (Compiler's Guide)

(1994)

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All materials may present unknown hazards and should be used with appropriate caution.

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