KCDS No.: 105057-02 **TUFTONE MHBM-2** 1/4 Revised Date December 28, 2005 Kao Corporation Set Up Date November 28, 2005

MATERIAL SAFETY DATA SHEET

[1.PRODUCT AND COMPANY IDENTIFICATION] PRODUCT NAME : TUFTONE MHBM-2

SUPPLIER : Kao Corporation

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

DIVISION : Chemical Division TELEPHONE NUMBER : 81-3-5630-7700 FAX NUMBER : 81-3-5630-7889 EMERGENCY TELEPHONE: 81-3-5630-7700

NUMBER

[2.COMPOSITION/INFORMATION ON INGREDIENTS]

SUBSTANCE OR PREPARATION : Preparation

INGREDIENTS AND CONCENTRATION RANGE

Ingredients Concentration Range(%) CAS RN

Magenta Toner

INGREDIENTS CONTRIBUTING TO: None

THE HAZARD(JAPAN)

[3.HAZARDS IDENTIFICATION]

MOST IMPORTANT HAZARDS

ADVERSE HUMAN HEALTH : To the best of our investigation, no special hazards have to be

EFFECTS

ENVIRONMENTAL EFFECTS To the best of our investigation, no information about adverse effect in

the environment available.

PHYSICAL AND CHEMICAL HAZARDS

: May cause risk of dust explosion.

CLASS NAME FOR MSDS IN

JAPAN

: Not applicable

mentioned.

[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.

: Immediately hold eyelids open and flush with a stream of water for at IN CASE OF EYE CONTACT

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 EXTINGUISHING : No information available

MEDIA

SPECIFIC HAZARDS : May produce irritating or toxic gases in a fire.

 Keep away from sources of ignition and use appropriate extinguishing media. Fight fire from upwind position if possible. SPECIFIC METHODS

Use goggles in combination with dust mask, and another protections as PROTECTION OF FIREFIGHTERS

appropriate to situation.

[6.ACCIDENTAL RELEASE MEASURES]

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: Use mask, goggles and protective gloves. Large spills : Remove person to safety. Ensure adequate ventilation. PERSONAL PRECAUTIONS

Treat from upwind position.

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

METHODS FOR CLEANING UP

Prevent dispersion of dust.
 Sweep or vacuum by dust-explosion-proof type cleaner.

PREVENTION OF SECONDARY HAZARDS

: No information available

[7.HANDLING AND STORAGE]

HANDLING

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

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.
Prevent generation of dust. This material may cause risk of dust explosion.

STORAGE

STORAGE CONDITIONS

: Keep container tightly closed. Protect from sun. Store in a well-ventilated room (under 40 C).

PACKAGING MATERIALS : No information available

[8.EXPOSURE CONTROLS/PERSONAL PROTECTION]

 Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use an adequate ventilation. ENGINEERING MEASURES

Use local exhaust ventilation, in case of generation of dust.

LIMIT VALUES

ACGIH(TLV) : TWA 3mg/m3(respirable particulate); TWA 10mg/m3(inhalable particulate)

(Particulates Not Otherwise Classified)

OSHA(PEL) : Not established

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 : Full-body suit PROTECTION

HYGIENE MEASURES : No information available

[9.PHYSICAL AND CHEMICAL PROPERTIES]

PHYSICAL STATES

: Pulverizing powder FORM

COLOUR : Red ODOUR : Odourless : Not applicable рΗ

SPECIFIC TEMPERATURES/TEMPERATURE RANGES AT WHICH CHANGES IN PHYSICAL STATE OCCUR

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

TEMPERATURE

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FLASH POINT : Not applicable AUTOIGNITION TEMPERATURE : No data available

EXPLOSION PROPERTIES

LOWER LIMIT No data available : UPPER LIMIT No data available **EXPLOSION**

: No data available VAPOUR PRESSURE : No data available VAPOUR DENSITY

DENSITY 1.2 g/mL (20°C) (68°F)

SOLUBILITY

WATER SOLUBILITY : Insoluble

SOLVENT SOLUBILITY : Partially soluble in toluene, chloroform and tetrahydrofurane.

OCTANOL/WATER PARTITION : No data available

COEFFICIENT

OTHER DATA : 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 : No information available

PRODUCTS

OTHERS : No information available

[11.TOXICOLOGICAL 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 : No information available TOXICITY

CARCINOGENICITY : No information available IARC : Group 3 : Not Classifiable

Titanium dioxide Group 3,Unclassifiable as to carcinogenicity to humans Amorphous Silica

NTP : Not established OSHA : Not established

MUTAGENICITY : No information available TERATOGENICITY : No information available REPRODUCTION TOXICITY : No information available OTHER DATA : No information available

[12.ECOLOGICAL INFORMATION]

MOBILITY : No information available PERSISTENCE/ : No information available DEGRADABILITY

BIOACCUMULATION : No information available

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ECOTOXICITY

AQUATIC TOXICITY : No information available OTHER DATA : No information available

[13.DISPOSAL CONSIDERATIONS]

Review "HANDLING AND STORAGE (Section 7)".

Passed to a licensed waste contractor.
This product may cause risk of dust explosion.

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

Dispose of waste in accordance with local state and federal regulations.

[14.TRANSPORT INFORMATION]

Follow all regulations in your country or region

UN CLASS/UN NUMBER : Not applicable

: Review "ACCIDENTAL RELEASE MEASURES (Section 6)". Review "HANDLING AND STORAGE (Section 7)". PRECAUTIONS

Ensure containers without breakage or leakage. Ensure containers tightly fixed.
Follow all regulations in your country or region.
Avoid heating(keep under 40 C).

[15.REGULATORY INFORMATION]

Follow all regulations in your country or region

INVENTORIES Yes

ENCS(Japan) TSCA(USA) EINECS(EU) AICS(Australia) DSL(Canada) ECL(Korea) PICCS(Philippines) Yes No(ELINCS) Yes

Nο Yes Νo

KAO Corporation is not able to check up the regulatory information 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

sections(ISO 11014-1)

-International Chemical Safety Cards(ICSC) (Compiler's Guide)(1994)

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