KCDS No.: 105055-02 **TUFTONE MHBY-2** 1/4 Kao Corporation Revised Date December 28, 2005 Set Up Date November 28, 2005

MATERIAL SAFETY DATA SHEET

[1.PRODUCT AND COMPANY IDENTIFICATION]

PRODUCT NAME : TUFTONE MHBY-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 : 81-3-5630-7889 FAX NUMBER EMERGENCY TELEPHONE: 81-3-5630-7700

NUMBER

[2.COMPOSITION/INFORMATION ON INGREDIENTS]

: Preparation SUBSTANCE OR PREPARATION

INGREDIENTS AND CONCENTRATION RANGE

> CAS RN Ingredients Concentration Range(%)

Yellow 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 mentioned.

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 : 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 CONTACT 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 EXTINGUISHING : No information available

MEDIA

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

SPECIFIC METHODS Keep away from sources of ignition and use appropriate extinguishing

media. Fight fire from upwind position if possible.

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

[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

HANDI ING

[7.HANDLING AND STORAGE]

: 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 . Handle in well-ventilated areas. SAFE HANDLING ADVICE

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

: TWA 3mg/m3(respirable particulate);TWA 10mg/m3(inhalable particulate) (Particulates Not Otherwise Classified) ACGIH(TLV)

: Not established OSHA(PEL)

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

FORM : Pulverizing powder

COLOUR : Yellow ODOUR : Odourless : No data available

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

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

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

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 : No information available EYE IRRITATION SENSITIZATION : No information available CHRONIC TOXICITY/LONG TERM : No information available TOXICITY

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

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 KCDS No.: 105055-02 TUFTONE MHBY-2 4/4 Revised Date December 28, 2005

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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

Yes No(ELINCS)

ENCS(Japan) TSCA(USA) EINECS(EU) AICS(Australia) DSL(Canada) ECL(Korea) PICCS(Philippines) 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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