

MATERIAL SAFETY DATA SHEET

1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME IN CHINESE 环氧面漆 (主剂)
 PRODUCT NAME IN ENGLISH EPICON MARINE HB Yellow RAL1018, BASE
 NAME OF MANUFACTURER CHUGOKU MARINE PAINTS (SHANGHAI) LTD.
 ADDRESS OF MANUFACTURER 4677, JIASONG ROAD(NORTH),JIADING,SHANGHAI,CHINA
 ZIP CODE 201814
 FAX NO. 86-21-59501300
 EMERGENCY TEL NO. 86-21-59501000
 MSDS CODE CM EFFECTIVE DATE OCT 9,2008
 FIRE-FIGHTING TEL. NO. 119

2 COMPOSITION/INFORMATION ON INGREDIENTS

MIXTURE

CHEMICAL NAME	EPICON MARINE HB Yellow RAL1018, BASE	
HAZARDOUS INGREDIENTS	CONCENTRATION(%)	CAS NO.
XYLENE	5 - 10	1330-20-7
BUTYL CELLOSOLVE	5 - 10	111-76-2
PGME	5 - 10	107-98-2
MIBK	1 - 5	108-10-1
EPOXY RESIN	25-30	25068-38-6

3 HAZARD IDENTIFICATION

CLASSIFICATION OF HAZARD FLAMMABLE LIQUID TYPE 3
 IN VIVO PATHWAY INHALATION、INGESTION、SKIN CONTACT
 HUMAN HEALTH EFFECTS MAY CAUSE IRRITATION TO SKIN,EYE AND RESPIRATORY SYSTEM
 ENVIRONMENTAL EFFECTS TAKE PRE-CAUTION TO PREVENT CONTAMINATION TO SOIL AND WATER
 SPECIAL HAZARDS ACCUMULATION OF VAPOR MAY RESULT IN EXPLOSION

4 FIRST-AID MEASURES

SKIN CONTACT REMOVE CONTAMINATED CLOTHING
 WASH WITH SOAP, WATER OR INDUSTRIAL CLEANSER. DO NOT USE SOLVENT.
 EYE CONTACT FLUSH THOROUGHLY WITH RUNNING WATER. SEEK MEDICAL ADVICE
 INHALATION REMOVE INTO FRESH AIR. LOOSEN COLLAR KEEP AT REST; OXYGEN THERAPY IF NECESSARY;
 ARTIFICIAL RESPIRATION WHEN APNEA; SEEK MEDICAL ADVICE.
 INGESTION GARGLE,VOMIT,GASTROLAVAGE IMMEDIATELY. SEEK MEDICAL ADVICE.

5 FIRE-FIGHTING MEASURES

PHYSICAL AND CHEMICAL HAZARDS FLAMMABLE LIQUID, ACCUMULATION OF VAPOR MAY RESULT IN EXPLOSION
 EASILY GET FIRE WHEN MEET WITH NAKED FLAME OR HIGH TEMPERATURE.
 VAPOR IS HEAVIER THAN AIR.
 HARMFUL REACTIVE PRODUCTS FIRE WITH SMOKE、CO、CO₂
 EXTINGUISHING MEDIA CO₂、FOAMS、DRY SAND AND CHEMICAL POWDER.
 FIRE FIGHTING MEASURES 1.FIRE FIGHTERS SHOULD WEAR PROPER PROTECTIVE EQUIPMENTS.
 2.REMOVE IMFLAMMABLE MATERIALS NEAR FIRE IMMEDIATELY.
 3.NO USING WATER.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS CLEANER SHOULD WEAR PERSONAL PROTECTIVE EQUIPMENT
 ENVIRONMENTAL PRECAUTIONS SLUDGE SHALL BE KEPT IN CONTAINER & SEALED
 METHODS FOR CLEANING UP SPILLAGE OR LEAKAGE SHOULD BE CLEANED WITH PROPER MATERIAL
 AND THE WASTE SHOULD BE DISPOSED IN ACCORDANCE TO ALL LOCAL REGULATIONS

7 HANDLING AND STORAGE

PRECAUTIONS IN HANDLING & STORAGE
 1. KEEP CONTAINER TIGHTLY CLOSED
 2. KEEP AWAY FROM HEAT & FIRE
 3. DON'T MIX WITH FOREIGN MATERIALS

4. KEEP IN COOL, DRY AREA (MAX.37° C & RH80%)
 5. AVOID PHYSICAL DAMAGE SUCH AS KNOCKING

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

LIMIT VALUE	HAZARDOUS INGREDIENTS	ACGIH(TLV)
	XYLENE	100 ppm
	BUTYL CELLOSOLVE	25 ppm
	PGME	100 ppm
	MIBK	50 ppm
	EPOXY RESIN	-

HYGIENE MEASURES	THE HARMFUL GAS CONCENTRATION IN THE AIR TESTED BY GAS CHROMATOGRAPHY. DUST CONTENT IN AIR TESTED ACCORDING TO GB/T5748-1985.
ENGINEERING MEASURES	VENTILATION EQUIPMENT : 1. USE EXPLOSION PROFF EXHAUST VENTILATION 2. USE NONSPARK CLOSED TYPE GROUND VENTILATION SYSTEM
PERSONAL PROTECTIVE EQUIPMENT	RESPIRATORY : USE A RESPIRATORY MASK FOR ORGANIC SOLVENT GASSES EYE : WEAR PROTECTIVE GOGGLES SKIN AND BODY : WORKER SHOULD WEAR OVERALL WORKING SUIT & SAFETY SHOES HAND : WEAR PROTECTIVE GLOVES

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	LIQUID WITH SOLVENT SMELL
PH VALUE	NOT AVAILABLE
MELTING POINT(°C)	NOT AVAILABLE
BOILING POINT(°C)	NOT AVAILABLE
SPECIFIC DENSITY (WATER=1)	1.45 - 1.55
VAPOUR DENSITY (AIR=1)	>1
OCTANOL/WATER PARTITION COEFFICIENT	NOT AVAILABLE
FLASH POINT(°C)	28°C (CLOSED CUP) (XYLENE)
AUTOIGNITION TEMPERATURE (°C)	NOT AVAILABLE
EXPLOSION LIMIT (UEL) (%)	NOT AVAILABLE
EXPLOSION LIMIT (LEL) (%)	NOT AVAILABLE
SOLUBILITY	INSOLUBLE IN WATER
EVAPORATION RATE	>1

10 STABILITY AND REACTIVITY

STABILITY	STABLE
MATERIALS TO AVOID	STRONG OXIDIZED AGENTS,ACIDS,ALKALIS.
CONDITIONS TO AVOID	HEAT, SPARK & FLAME
HAZARDOUS POLYMERIZATION	IMPOSSIBLE
HAZARDOUS DECOMPOSED PRODUCTS	FIRE WITH SMOKE、CO、CO ₂

11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY	HAZARDOUS INGREDIENTS	LD50
	XYLENE	4300 mg/kg
	BUTYL CELLOSOLVE	530 mg/kg
	PGME	5660 mg/kg
	MIBK	2080 mg/kg
	EPOXY RESIN	-

12 ECOLOGICAL INFORMATION

ECOLOGICAL TOXICITY	NOT AVAILABLE
BIODEGRADATION	NOT AVAILABLE
NON-BIODEGRADATION	NOT AVAILABLE

13 DISPOSAL CONSIDERATIONS

WASTE TYPE	HAZARDOUS WASTE
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DISPOSAL METHODS DISPOSING SHOULD FOLLOW ALL LOCAL REGULATIONS
 NOTES STORAGE AND DISPOSING SHOULD FOLLOW ALL LOCAL REGULATIONS

14 TRANSPORT INFORMATION

DANGEROUS GOODS NO. 33646
 UN NO. 1263
 CLASSIFICATION OF HAZARD FLAMMABLE LIQUID
 HAZARD LABEL III
 PACKING METHODS STEEL DRUM
 PRECAUTIONS IN TRANSPORT 1. KEEP CONTAINER TIGHTLY CLOSED
 2. KEEP AWAY FROM STRONG SUNSHINE
 3. AVOID PHYSICAL DAMAGE SUCH AS KNOCKING

15 REGULATORY INFORMATION

NO. 170 International Regulation (<作业场所安全使用化学品公约>)
 Regulations for Safety Using Chemical Product in Work-place (<作业场所安全使用化学品规定>)
 Regulations on the Control over Safety of Dangerous Chemicals (<危险化学品管理条例>)
 Rules on Management and Control Ships Carrying Dangerous Cargo (<船舶装载危险货物监督管理规则>)

16 OTHER INFORMATION

REFERENCE LIST

- RAW MATERIAL DATA BASE (JAPANESE PAINT MANUFACTURERS ASSOCIATION)
- SOLVENT POCKET BOOK (YUUKIE KAGAKU KYOKAI)
- INTERNATIONAL CHEMICAL SUBSTANCE SAFETY CARD (KAGAKU KOGYO NIPPON)
- REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCE (NIOSH)
- ACGIH : 1990-1991 THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS.
- HAND BOOK OF HAZARDS AND HARM OF CHEMICAL SUBSTANCE (CHUOH RODOHSAIGAI BOHSHI KYOKAI)
- DATA BOOK OF HAZARDOUS SUBSTANCE (MARUZEN)

DATE PREPARED 2008-10-9
 DIVISION IN CHARGE CHUGOKU MARINE PAINTS(SHANGHAI)LTD./TECH. DIV.
 SECTION TO REVIEW CHUGOKU MARINE PAINTS(SHANGHAI)LTD.
 COMMENTS OF REVISION NO INFORMATION

OTHER INFORMATION

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