

Shin-Etsu MicroSi®

MATERIAL SAFETY DATA SHEET

Doc. No. 40100

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MicroSi part number: MP-P20

SECTION 1- COMPANY AND PRODUCT IDENTIFICATION ***

PREPARED BY:
MICROSI, INC.
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PHOENIX, AZ 85044

MANUFACTURER: SHIN-ETSU CHEMICAL CO., LTD.
6-1, 2-CHOME, OHTEMACHI, CHIYODAKU, TOKYO, JAPAN
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PREPARED 08/17/98
REVISED 10/19/98

PRODUCT NAME: **MICROPRIME PRIMER P-20**
CHEMICAL NAME: HEXAMETHYLDISILANZANE/PGMEA
CHEMICAL FAMILY: DEHYDRATING FORMULATION

SECTION 2 COMPOSITION

PRODUCT COMPOSITION	APPROX. %	ACGIH TLV	OSHA PEL LD50	UNITS	CASREG. NO.
HEXAMETHYLDISILAZANE, HMDS	20%	NA	NA	NA	999-97-3
PROPYLENE GLYCOL MONOMETHY- ETHER ACETATE, PMA PGMEA- 1-METHOXY-2-PROPYL ACETATE	80%		8.5 G/KG FEMALE 10.0 G/KG MALE		108-65-6

Some items on this MSDS may be designated as trade secrets. Bonafide requests for disclosure of trade secret information to medical person must be made in accordance with the provisions contained in 29 CFR 1910.1200 I 1-13.

SECTION 3 HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION: FLAMMABLE LIQUID (BASED ON IMO)
FIRE AND EXPLOSION: NONE
POTENTIAL HEALTH EFFECTS:
INGESTION: MAY CAUSE HEADACHE, NAUSEA, VOMITING, AND ABDOMINAL PAINS. MODERATE TOXIC

INHALATION: MAY CAUSE ANESTHESIA, HEADACHES
SKIN CONTACT: CAUSES SEVERE IRRITATION
EYE CONTACT: CAUSES SEVERE IRRITATION
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SECTION 4 FIRST AID MEASURES

INHALATION: MOVE INTO FRESH AIR. CONTACT PHYSICIAN AT ONCE. ADMINISTER OXYGEN IF THERE IS DIFFICULTY IN BREATHING
SKIN CONTACT: IMMEDIATELY FLUSH SKIN WITH PLENTY WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. REMOVE CONTAMINATED CLOTHING AND LAUNDRER BEFORE USE.
EYE CONTACT: IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CONTACT PHYSICIAN AT ONCE.
INGESTION: IF PERSON IS CONSCIOUS, GIVE WATER OR MILK TO DILUTE STOMACH CONTENTS. CONSULT PHYSICIAN.

SECTION 5 FIRE FIGHTING MEASURES

FLASH POINT : 95 F
EXTINGUISHING MEDIA : CARBON DIOXIDE, FOAM OR DRY CHEMICAL
SPECIAL FIREFIGHTING PROCEDURES: USE SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. USE WATER SPRAY TO COOL DRUMS IN FIRE AREA.
UNUSUAL FIRE AND EXPLOSION HAZARDS: UNDER FIRE CONDITIONS, MAY EMIT TOXIC AND CORROSIVE NITROGEN OXIDE VAPORS AND OTHER TOXIC FUMES.

SECTION 6 ACCIDENTAL RELEASE MEASURES

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

WIPE, SOAK UP IN AN INERT MATERIAL
SCRAPE UP AND PUT IN A CONTAINER FOR DISPOSAL
WEAR PROPER PROTECTIVE EQUIPMENT AS SPECIFIED IN THE PROTECTIVE EQUIPMENT SECTION
WARN OTHER WORKERS OF SPILL

DISPOSAL METHOD: DISPOSAL SHOULD BE MADE IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. INCINERATION RECOMMENDED.

SECTION 7 HANDLING AND STORAGE

KEEP CONTAINER CLOSED WHEN NOT IN USE
STORE UPRIGHT IN A COOL PLACE BELOW 30 C (85 F)
TRANSPORT AND STORE UNDER DRY CONDITIONS TIGHTLY CLOSED
KEEP AWAY FROM HEAT, SPARKS AND FLAME

SECTION 7 HANDLING AND STORAGE (CONTINUED)

USE IN A WELL VENTILATED AREA
EXHAUST VENTILATION
SHOWERS
EYEWASH STATIONS

INFORMATION ON EMPTIED CONTAINER

DO NOT REUSE THIS CONTAINER
THIS CONTAINER MAY BE HAZARDOUS WHEN EMPTIED
KEEP AWAY FROM HEAT, SPARKS AND FLAME
DO NOT PUNCTURE OR CUT THIS CONTAINER, AND DO NOT WELD ON OR NEAR THIS
CONTAINER

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES

ACGIH TLV-TWA: NO DATA AVAILABLE
OSHA PEL: NO DATA AVAILABLE

RESPIRATORY PROTECTION:

USE IN A WELL VENTILATED AREA. USE APPROVED NIOSH RESPIRATORY PROTECTION.
AMMONIA CARTRIDGE RESPIRATOR RECOMMENDED FOR EXPOSURES EXCEEDING TLV. SEE SPECIAL
PRECAUTIONS.

VENTILATION:

USE LOCAL EXHAUST VENTILATION

PROTECTIVE CLOTHING:

RUBBER GLOVES

EYE PROTECTION:

SAFETY GOGGLES OR FULL FACE SHIELD

WORK/HYGIENE PRACTICES: AVOID SKIN CONTACT, PRACTICE GOOD PERSONAL HYGIENE

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 134 C
VAPOR PRESSURE(50 C): 79mmHg
VAPOR DENSITY(AIR=1): NA
SPECIFIC GRAVITY: 0.95

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES CONTINUED

MELTING POINT: NOT APPLICABLE
EVAPORATION RATE: < ETHER
SOLUBILITY IN WATER: LAYERS, FORMS 2
APPEARANCE - COLOR: ESS. NONE
APPEARANCE - FORM: LIQUID
ODOR: CHARACTERISTIC AMMONIA LIKE ODOR

SECTION 10 STABILITY AND REACTIVITY

STABILITY: STABLE
CONDITIONS TO AVOID: OXIDIZING AGENTS, STRONG ACIDS, ALKALINE MATERIALS, WATER, ALCOHOL. MAY REACT QUICKLY WITH ALCOHOLS AND WATER UNDER SOME CONDITIONS WITH RELEASE OF MODERATE AMOUNTS OF HEAT
INCOMPATIBILITY (MATERIALS TO AVOID): OXIDIZING AGENTS, STRONG ACIDS, ALKALINE MATERIALS, WATER AND ALCOHOL
HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION MAY GENERATE
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION 11 TOXICOLOGICAL INFORMATION

SKIN IRRITATION: SKIN RABBIT: NONE
EYE IRRITATION: EYE-RABBIT: NONE
ACUTE TOXICITY (LD50): LD50 (Oral Rat): UNKNOWN
LD50 (Oral Rat): UNKNOWN
ACUTE TOXICITY (LC50): LC50 (Inhalation Rat): UNKNOWN
CHRONIC TOXICITY: IN A SINGLE REPORTED RABBIT STUDY THE MINOR ISOMER, 2-METHOXY-1-PROPYL ACETATE, PRESENT AT <0.5% GAVE A RESPONSE AT 535 PPM. ARCO CHEMICAL ADVISES THAT CONSIDERING THE MANY NEGATIVE TOXICITY RESULTS ON PGMEA AND THE LOW ISOMER LEVEL "...THE EFFECTS DESCRIBED IN THE ECTOC REPORT AND NOT EXPECTED TO BE OF CONCERN."
CARCINOGENICITY: NOT CONSIDERED CARCINOGENIC BY NTP, IARC, AND OSHA
ROUTES OF EXPOSURE: INHALATION OF MISTS OF VAPORS, EYE AND SKIN CONTACT, INGESTION, SKIN ABSORPTION

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SECTION 12 ECOLOGICAL INFORMATION

BIODEGRADATION: NO INFORMATION IS AVAILABLE
BIOACCUMULATION: NO INFORMATION IS AVAILABLE
AQUATICTOXICITY: NO INFORMATION IS AVAILABLE
OTHER INFORMATION: NONE

SECTION 13 DISPOSAL CONSIDERATIONS

CAN BE BURNED IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER .
DO NOT DISPOSE OF THE EMPTIED CONTAINER UNLESS THE CONTENTS HAVE BEEN COMPLETELY
REMOVED AND THE CONTAINER HAS BEEN FLUSHED AND THEN DRIED.
DO NOT DISPOSE OF THE EMPTIED CONTAINER UNLAWFULLY. OBSERVE ALL FEDERAL, STATE, AND
LOCAL LAWS.

SECTION 14 TRANSPORTATION INFORMATION

DOT SHIPPING NAME: NOT KNOWN
DOT HAZARD CLASS: FLAMMABLE, 3
DOT LABEL(S): NA
UN/NA NUMBER: NA
PLACARDS: NA

EXPORT: NA

EPA HAZARD WASTE: NA
OSHA HAZARD CLASS: NA
CPSC CLASSIFICATION: NA
TRANSPORTATION CLASS: IMO NA
RID(OCTI) NA
ADR(ECE) NA
RAR(IATA) NA

NFPA/HMIS CLASSIFICATION: FLAMMABILITY 3, REACTIVITY 1, HEALTH 3

SECTION 15 REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS:

*** THIS PRODUCT SHOULD BE USED IN COMPLIANCE WITH LOW VOLUME EXEMPTIONS UNDER TSCA.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTION 313 SUPPLIER NOTIFICATION:

THIS REGULATION REQUIRES SUBMISSION OF ANNUAL REPORTS OF TOXIC CHEMICAL(S) THAT APPEAR IN SECTION 313 OF THE EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT OF 1986 AND 40 CFR 372. THIS INFORMATION MUST BE INCLUDED IN ALL MSDSs THAT ARE COPIED AND DISTRIBUTED FOR THE MATERIAL.

OSHA PHYSICAL HAZARDS: CORROSIVE, FLAMMABLE

OSHA HEALTH HAZARDS: EYE HAZARD, IRRITANT, NERVE SYSTEM TOXIN, SKIN HAZARD

SARA HAZARD CLASS: ACUTE:YES, CHRONIC:NO, FIRE HAZARD:YES, PRESSURE:NO, REACTIVITY: NO

THE TOXIC CHEMICALS CONTAINED IN THIS PRODUCT ARE: NONE

CALIFORNIA PROPOSITION 65:

THIS PRODUCT DOES NOT CONTAIN MATERIALS WHICH THE STATE OF CALIFORNIA HAS FOUND TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

HAZARD CATERGORIES UNDER CRITERIA OF SARA TITLE III RULES (40 CFR 370): IMMEDIATE, DELAYED, FIRE HAZARD

**THE CALIFORNIA PROPOSITION 65 CHEMICAL(S) CONTAINED IN THIS PRODUCT ARE:
NONE**

SECTION 16 OTHER INFORMATION

FOR INDUSTRIAL USE ONLY

THIS MATERIAL SAFETY DATA SHEET IS OFFERED SOLELY FOR YOUR INFORMATION, CONSIDERATION AND INVESTIGATION. THE DATA DESCRIBED IN THIS MSDS CONSIST OF DATA ON LITERATURE, OUR ACQUISITIONAL DATA AND ANALOGICAL INFERENCE BY DATA OF SIMILAR CHEMICAL SUBSTANCES OR PRODUCTS. SHIN-ETSU CHEMICAL CO. LTD. PROVIDES NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF THE DATA CONTAINED HEREIN.
