



MATERIAL SAFETY DATA SHEET

FILE NO.:
MSDS DATE: / /

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: S-LAND BM RED
SYNONYMS:
PRODUCT CODES: UNV07052, OFF82441, UNV08082, UNV07072, UNV17082, UNV18082
MANUFACTURER: S-LAND CO.,LTD
DIVISION:
ADDRESS: RM305,SEEUN BLDG 909 HWAJUNG-DONG, DUKYANG-KU, KOYANG-CITY, KYUNGGI-DO,KOREA
EMERGENCY PHONE: 82-31-966-2771
CHEMTREC PHONE:
OTHER CALLS:
FAX PHONE: 82-31-966-2701
CHEMICAL NAME:
CHEMICAL FAMILY:
CHEMICAL FORMULA:
PRODUCT USE: PERMANENT MARKER PEN INDUSTRY
PREPARED BY:
SECTION 1 NOTES:

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:

CAS NO.	% WT	% VOL	SARA 313 REPORTABLE
64-17-5			
107-98-2			
71-12-8			
100-51-6			
36009-09-2			
65138-66-1			

OSHA PEL-TWA:
OSHA PEL STEL :
OSHA PEL CEILING:
ACGIH TLV-TWA:
ACGIH TLV STEL:
ACGIH TLV CEILING:

SECTION 2 NOTES:

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: MAY BE IRRITATING TO RESPIRATORY TRACT,SKIN AND EYES. THIS PRODUCT IS NOT RAPIDLY IGNITABLE. USE ONLY WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING
ROUTES OF ENTRY:
POTENTIAL HEALTH EFFECTS
EYES:

EXTINGUISHING MEDIA: DRY CHEMICAL, WATER SPRAY, FOAM, CO2 GASES OF CO2 AND OTHER HAZARDOUS OXIDES COULD BE GENERATED. SELF-CONTAINED BREATHING APPARATUS FOR FIGHTERS. MOVE CONTAINER FROM FIRE IF YOU CAN DO IT WITHOUT RISK. DO NOT SCATTER SPILLED MATERIAL WITH HIGH PRESSURE WATER STEAMS.

SPECIAL FIRE FIGHTING PROCEDURES:

HMIS HAZARD CLASSIFICATION
HEALTH: FLAMMABILITY: REACTIVITY:
PROTECTION:

NFPA HAZARD CLASSIFICATION
HEALTH: FLAMMABILITY: REACTIVITY:
OTHER:

AUTOIGNITION TEMPERATURE:
F:
C:

METHOD USED:
F:
C:

FLASH POINT:
FLAMMABLE LIMITS IN AIR, UPPER:
(% BY VOLUME) LOWER:

SECTION 5: FIRE-FIGHTING MEASURES

SECTION 4 NOTES:

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

IMMEDIATELY.

INHALATION: IF INHALED, MOVE TO FRESH AIR. PERFORM ARTIFICIAL RESPIRATION IF NECESSARY. GET MEDICAL ATTENTION

INGESTION: IF SWALLOWED, DILUTE WITH WATER AND INDUCE VOMITING. GET MEDICAL ATTENTION IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO UNCONSCIOUS PERSON.

SKIN: REMOVE CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH AFFECTED SKIN WITH SOAP AND WATER. GET MEDICAL ATTENTION IMMEDIATELY

EYES: FLUSH EYE WITH FLOWING WATER UNTIL NO EVIDENCE OF CHEMICAL REMAINS

SECTION 4: FIRST AID MEASURES

SECTION 3 NOTES:

CARCINOGENICITY
OSHA:
OTHER:
ACGIH:
NTP:
IARC:

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

CHRONIC HEALTH HAZARDS:

ACUTE HEALTH HAZARDS:

INHALATION:

INGESTION:

SKIN:

UNUSUAL FIRE AND EXPLOSION HAZARDS:

HAZARDOUS DECOMPOSITION PRODUCTS:

SECTION 5 NOTES:

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

SECTION 6 NOTES:

PERSONAL PRECAUTION: CLEAN UP WITH APPROPRIATE PERSONAL EQUIPMENT(SEE SECTION 8) SCOOP OR SWEEP & TRANSFER INTO A CLOSED CONTAINER. KEEP WASTE OUT OF SEWERS.

METHOD FOR CLEANING UP: SCOOP OR SWEEP INTO A CONTAINER FOR REUSE OR DISPOSAL. KEEP UNNECESSARY PERSON AWAY.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: STORED IN COOL DRY PLACE, KEEP CONTAINER TIGHTLY CLOSED. DO NOT INHALE THE SUBSTANCE AND AVOID CONTACT WITH THE SKIN OR EYES. WEAR PROTECTIVE CLOTHING WHEN HANDLING OPEN CONTAINER; AVOID ENVIRONMENTAL POLLUTION BY HANDLING THE PRODUCT CAREFULLY. WASH THOROUGHLY AFTER HANDLING. USE ONLY WITH ADEQUATE VENTILATION.

OTHER PRECAUTIONS:

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

VENTILATION :

RESPIRATORY PROTECTION: LOCAL EXHAUST VENTILATION

EYE PROTECTION: SAFETY GOGGLES

SKIN PROTECTION :IMPERVIOUS CLOTHING

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

WORK HYGIENIC PRACTICES: RUBBER GLOVES

EXPOSURE GUIDELINES:

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: UNIFORM LIQUID

ODOR: ODOUR LIKE ALCOHOL

PHYSICAL STATE:

pH AS SUPPLIED: 6.0-8.5

pH (Other):

BOILING POINT:

F:

C: 100

MELTING POINT: NO DATA AVAILABLE

F:
C:

FREEZING POINT:

F:
C:

VAPOR PRESSURE (mmHg):

@

F:
C:

VAPOR DENSITY (AIR = 1):

@

F:
C:

SPECIFIC GRAVITY (H₂O = 1):

@

F:
C:

EVAPORATION RATE:

BASIS (=1):

SOLUBILITY IN WATER: INSOLUBLE IN WATER

PERCENT SOLIDS BY WEIGHT:

PERCENT VOLATILE:

BY WT/ BY VOL @

F:
C:

VOLATILE ORGANIC COMPOUNDS (VOC):

WITH WATER: LBS/GAL
WITHOUT WATER: LBS/GAL

MOLECULAR WEIGHT:

VISCOSITY:

@

F:
C:

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABLE

UNSTABLE

STABILITY: STABLE UNDER NORMAL CONDITION OF STORAGE AND USE

CONDITIONS TO AVOID (STABILITY):

INCOMPATIBILITY (MATERIAL TO AVOID):

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

HAZARDOUS POLYMERIZATION:

CONDITIONS TO AVOID (POLYMERIZATION):

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:
TOLERANCE LIMIT: 50(50)PPM, 205(200)PPM
ACTUAL ORAL TOXICITY: LD50(RAT): 5410MG/KG
SKIN IRRITATION/RABBIT/DRAIZE TEST: NO DATA AVAILABLE

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: NO DATA AVAILABLE

SECTION 12 NOTES: NO DATA AVAILABLE

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: ENSURE THAT DISPOSAL IS IN COMPLIANCE WITH LOCAL, NATIONAL REGULATION
RCRA HAZARD CLASS:

SECTION 13: DISPOSAL CONSIDERATIONS (cont)

SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION
PROPER SHIPPING NAME:
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENT:

WATER TRANSPORTATION
PROPER SHIPPING NAME:
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENTS:

AIR TRANSPORTATION
PROPER SHIPPING NAME:
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENTS:

OTHER AGENCIES:

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS
TSCA (TOXIC SUBSTANCE CONTROL ACT):

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

311/312 HAZARD CATEGORIES:

313 REPORTABLE INGREDIENTS:

STATE REGULATIONS:

INTERNATIONAL REGULATIONS:

SECTION 15 NOTES:

SECTION 16: OTHER INFORMATION

OTHER INFORMATION: THIS INFORMATION IS FURNISHED WITHOUT WARRANTY EXPRESSED OR IMPLIED, EXCEPT THAT IT IS ACCURATE TO THE BEST KNOWLEDGE SLAND, THE DATA ON THIS SHEET RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN, S-LAND, ASSUMES NO LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON THESE DATA.

PREPARATION INFORMATION:

DISCLAIMER: