Product ID:METHYL ISOBUTYL KETONE MSDS Date:06/23/1999 FSC:6810 NIIN:00-052-1371 MSDS Number: BGSMG === Responsible Party === Company Name: SPECTRUM CHEMICAL MFG CORP. Address:14422 SOUTH SAN PEDRO STREET City:GARDENA State:CA ZIP:90248-2027 Country:US Info Phone Num:714-864-2310 Emergency Phone Num:310-516-8000 Chemtrec Ind/Phone:(800)424-9300 CAGE:6341 5 === Contractor Identification === Company Name: CHEMICAL COMMODITIES AGENCY, INC. Address:27447 PACIFIC STREET Box:City:HIGHLAND State:CA ZIP:92346-2640 Country:US Phone:909-864-2310 CAGE:60777 Company Name: COMPTECH CORP Address:15944 DERWOOD RD Box:City:ROCKVILLE State:MD ZIP:20855 Country:US Phone:800-284-5279; 301-519-3401 Contract Num:SP0450-01-M-D514 CAGE:0BR38 Company Name: SPECTRUM LABORATORY PRODUCTS INC Address:14422 S SAN PEDRO ST Box:City:GARDENA State:CA ZIP:90248-2027 Country:US Pho

ne:310-516-8000/FAX: 310-516-9843 CAGE:63415

Ingred Name:METHYL ISOBUTYL KETONE (HEXONE) (SARA 313) (CERCLA) CAS:108-10-1 RTECS #:SA9275000 = Wt:100. Other REC Limits:NONE RECOMMENDED OSHA PEL:100 PPM ACGIH TLV:50 PPM/75 STEL; 9596 EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

LD50 LC50 Mixture:ORAL LD50 (RAT): 2080 MG/KG. Routes of Entry: Inhalation:YES Ski n:YES Ingestion:YES

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE: VERY HAZARDOUS IN CASE OF EYE CONTACT (IRRITANT) OF INGESTION OF INHALATION. HAZARDOUS IN CASE OF SKIN CONTACT (IRRITANT PERMEATOR). INFLAMMATION OF THE EYE IS CHARACTERIZED BY REDNESS, WATERIN G AND IRCHING. CHRONIC: CARCINOGENIC EFFECTS: NOT AVAILABLE. MUTAGENIC EFFECTS: NOT AVAILABLE. TERATOGENIC EFFECTS: NOT AVAILABLE. DEVELOPMENTAL TOXICITY: NOT AVAILABLE

. THE SUBSTANCE IS TOXIC TO LUNG S, THE NERVOUS SYSTEM, MUCOUS MEMBRANES. REPEATED OR PROLONGED EXPOSURE TO THE SUBSTANCE CAN PRODUCE TARGET ORGANS DAMAGE.

Explanation of Carcinogenicity:NOT AVAILABLE.

Effects of Overexposure:ACUTE: VERY HAZARDOUS IN CASE OF EYE CONTACT (IRRITANT) OF INGESTION OF INHALATION. HAZARDOUS IN CASE OF SKIN CONTACT (IRRITANT PERMEATOR). INFLAMMATION OF THE EYE IS CHARACTERIZED BY REDNESS, WATERIN G AND IRCHING. CHRONIC: CARCINOGENIC EFFECTS: NOT

AVAILABLE. MUTAGENIC EFFECTS: NOT AVAILABLE. TERATOGENIC EFFECTS: NOT AVAILABLE. DEVELOPMENTAL TOXICITY: NOT AVAILABLE. THE SUBSTANCE IS TOXIC TO LUNG S, THE NERVOUS SYSTEM, MUCOUS MEMBRANES. REPEATED OR PROLONGED EXPOSURE TO THE SUBSTANCE CAN PRODUCE TARGET ORGANS DAMAGE. Medical Cond Aggravated by Exposure:NO DATA PROVIDED BY MANUFACTURER.

First Aid:EYES: CHECK FOR AND REMOVE ANY CONTACT LENSES. IMMEDIATELY

FLLUSH EYES WITH RUNNING WATER FOR AT LEAST 15 MINUTES, KEEPING EYELIDS OPEN. COLD WATER MAY BE USED. DO NOT USE AN EYE OINMENT. SEEK MEDICAL ATTENTION. SKIN CONTACT: AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF WATE. GENTLY AND THROUGHLY WASH THE CONTAMINATED SKIN WITRH RUNNING WATER AND NON-ABRASIVE SOAP. BE PARTICULARLY CAREF UL TO CLEAN FOLDS, CREVICES, CREASES AND GROIN. COLD WATER MAY BE USED. COVER THE IRRITATED SKIN WITH AN EMOLLIENT. **IF IRRIT** ATION PERSISTS, SEEK IMMEDIATE MEDICAL ATTENTION. WASH CONTAMINATED CLOTHING BEFORE REUSING. SERIOUS SKIN CONTACT: Flash Point Method:CC Flash Point:=14.C, 57.2F Autoignition Temp:=460.C, 860.F Lower Limits:1.4 Upper Limits:7.5 Extinguishing Media: SMALL FIRE: USE DRY CHEMICAL POWDER. LARGE FIRE: USE ALCOHOL FOAM, WATER SPRAY OR FOG. Fire Fighting Procedures: FLAMMABLE LIQUID, SOLUBLE OR DISPERSED IN WATER. Unusual Fire/Explosion Hazard: FLAMMABLE IN PRESENCE OF OPEN FLAMES AND SPARKS. RISKS OF EXPLOSION OF THE PRODUCT IN PRESENCE OF MECHANICAL IMPACT. NOT AVAILABLE. RISKS OF EXPLOSION OF THE PRODUCT IN PRESENCE OF STATIC DISCHARGE. N OT AVAILABLE. Spill Release Procedures: SMALL SPILL: DILUTE WITH WATER AN MOP UP, OR ABSORB WITH AN INERT DRY MATERIAL AND PLACE IN AN APPROPRIATE WASTE DISPOSAL CONTAINER. LARGE SPILL: F LAMMABLE LIQUID. KEEP AWAY FROM HEAT. KEEP AWAY FROM SOURCES OF IGNITION. STOP LEAK IF WITHOUT RISK. ABSORB WITH DRY EARTH SAND OR OTHER NON-COMBUSTIBLE MATERIAL. DO NOT TOUCH SPILLED MATERIAL. PREVENT ENTRY INTO SEWERS, BASEMENTS OR CONFINED AREAS: Neutralizing Agent:NO DATA PROVIDED BY MANUFACTURER.

Handling and Storage Precautions: FLAMMABLE MATERIALS SHOULD BE STORED IN A SEPARATE SAFETY STORAGE CABINET

OR ROOM. KEEP WAY FROM HEAT. KEEP AWAY FROM SOURCES OF IGNITION. KEEP CONTAINER TIGHTLY CLOSED. KEEP IN A COOL WELL-VENTILATED PLACE. GROUND ALL EQUIPMENT CONTANING MATERIAL. A REFRIGERATED ROOM WOULD BE PREFERABLE FOR Other Precautions:KEEP AWAY FROM HEAT. KEEP AWAY FROM SOURCES OF IGNITION. GROUND ALL EQUIOMENT CONTAING MATERIAL. DO NOT INGEST. DO NOT BREATHE GAS/FUMES/VAPOUR/SPRAY. IN CASE OF INSUFFICENT VENTILATION WEAR SUITABLE RESPIRATORY EQUIPMENT. IF INGESTED, SEEK
MEDICAL ADVICE IMMEDIATELY AND SHOW THE CONTAINER OR THE LA BEL.AVOID CONTACT
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Respiratory Protection:VAPOR RESPIRATOR. BE SURE TO USE AN APPROVED/CERTIFIED RESPIRATOR OR EQUIVALENT GLOVES. Ventilation:PROVIDE EXHAUST VENTILATION OR OTHER ENGINEERING CONTROLS TO KEEP THE AIRBORNE CONCENTRATIONS OF VAPORS BELOW THEIR RESPECTIVE THRESHOLD LIMIT VALUE. Protective Gloves:GLOVES Eye Protection:SPLASH GOGGLE S
Other Protective Equipment:LAB COAT. ENSURE THAT EYEWASH STATIONS AND SAFETY SHOWERS ARE PROXIMAL TO THE WORK-STATION LOCATION. Work Hygienic Practices:AVOID SKIN & EYE CONTACT. AVOID BREATHING VAPORS. WASH THOROUGHLY AFTER USE. DO NOT SMOKE IN USE AREA. Supplemental Safety and Health NONE SPECIFIED BY MANUFACTURER.
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HCC:F2 Boiling Pt:=115.9C, 240.6F Melt/Freeze Pt:=-84.C, -119.2F Vapor Pres:15.7 MM OF HG @20C Vapor Density:3.45 Spec Gravity:0.802 pH:NOT AVAILABLE Viscosity:NP Solubility in Water:PARTIALLY SOLUBLE IN COLD Appearance and Odor:LIQUID, ODOR TASTE AND COLOR NOT AVAILABLE.
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Stability Indicator/Materials to Avoid:YES NOT AVAILABLE. Stability Condition to Avoid:NOT AVAILABLE. Hazardous Decomposition Products:NOT AVAILABLE.
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Toxicological Information:TOXICITY TO A

NIMALS: ACUTE ORAL TOXICITY (LD50): 1600 MG/KG (GUINEA PIG). ACUTE DERMAL TOXICITY (LD50): 20001 MG/KG (RABBIT). ACUTE TOXICTY OF VAPOR (LC50): 8000 PPM 4 HOURS (RAT). CHRONIC EFFECTS ON HUMANS: THIS SUBSTANCE IS TOXIC TO LUNGS, THE NERVOUS SYSTEM, MUCOUS. OTHER TOXIC EFFECTS ON HUMANS: VERY HAZARDOUS IN CASE OF INGESTION, OF INHALATION. HAZARDOUS IN
CASE OF SKIN CONTACT (IRRITANT, PE RMEATOR). SPECIAL REMARKS ON TOXICITY TO ANIMALS: NOT AVAILABLE. SPECIAL REMARKS ON CHRONIC
EFFECTS ON HUMANS: PASSES THROUGH PLACENTAL BARRIER IN HUMAN. SPECIAL REMARKS ON OTHER TOXIC EFFECTS ON HUMA NS: NOT AVAILABLE.
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Ecological:ECOTOXICITY: NOT AVAILABLE. BOD5 AND COD: NOT AVAILABLE. PRODUCTS OF BIODEGRADATION: POSSIBLY HAZARDOUS SHORT TERM DEGRADATION PRODUCTS ARE NOT LIKELY. HOWEVER, LONG TERM DEGRADATION PRODUCTS MAY ARIS E. TOXICITY OF THE PRODUCTS OF BIODEGRADATION: THE PRODU CTS OF DEGRADATION ARE LESS THAN THE PRODUCT ITSELF.
SPECIAL REMARKS ON THE PRODUCTS OF BIODEGRADATION: NOT AVAILABLE.
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Waste Disposal Methods:RECYCLE TO PROCESS, IF POSSIBLE. CONSULT YOUR LOCAL OR REGIONAL AUTHORITIES.
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Transport Information:DOT CLASSIFICATION: CLASS 3, FLAMMABLE. IDENTIFICATION: METHYL ISOBUTYL KETONE, UN1245, PG II. SPECIAL
PROVISION FOR TRANSPORT: NOT AVAILABLE.
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 SARA Title III Information:SARA 313: TOXIC CHEMICAL NOTIFICATION & RELEASE REPORTING: METHYL ISOBUTYL KETONE. Federal Regulatory Information:CERCLA HAZARDOUS SUBSTANCES: METHYL ISOBUTYL KETONE. TSCA 8(B) INVENTORY: METHYL ISOBUTYL KETONE. State Regulatory Information:PENNSYLVANIA RTK: METHYL ISOBUTYL KETONE. MASSACHUSETTS RTK:METHYL ISOBUTYL KETONE.

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