

HOECHST CELANSES CHEMICAL GROUP IND -- 26200004, METHYL ISOBUTYL KETONE --
6810-00-281-2761

===== Product Identification =====

Product ID:26200004, METHYL ISOBUTYL KETONE

MSDS Date:02/23/2000

FSC:6810

NIIN:00-281-2761

Status Code:A

MSDS Number: CKXQT

=== Responsible Party ===

Company Name:HOECHST CELANSES CHEMICAL GROUP IND

Address:1601 W LBJ FWY

Box:819005

City:DALLAS

State:TX

ZIP:75381-9005

Co

untry:US

Info Phone Num:214-277-4000/972-443-4000

Emergency Phone Num:(800)424-9300

Resp. Party Other MSDS Num.:#64

Chemtrec Ind/Phone:(800)424-9300

CAGE:0XRB0

=== Contractor Identification ===

Company Name:HOECHST CELANESE CHEMICAL GROUP INC

Address:1601 W LBJ FWY

Box:819005

City:DALLAS

State:TX

ZIP:75381-9005

Country:US

Phone:214-277-8575

CAGE:0XRB0

Company Name:SDB CONSULTANTS LTD

Address:401 WHITNEY AVE SUITE 120

Box:City:GRETNA

State:LA

ZIP:70056

Country:US

Phone:504-366-9105

Contract Num:S

P0450-01-M-D520
CAGE:0PGK2

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Composition/Information on Ingredients
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Ingred Name:METHYL ISOBUTYL KETONE. SYNONYMS: ISOBUTYL METHYL KETONE,
ISOPROPYL ACETONE, 2-METHYL-4-PENTANONE, 4-METHYL-2-PENTANONE.

CAS:108-10-1

RTECS #:SA9275000

= Wt:99.

OSHA PEL:410 MG/M3;100 PPM

ACGIH TLV:205 MG/M3;50 PPM

ACGIH STEL:307 MG/M3;75 PPM

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

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Hazards Identification
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LD50 LC50 Mixture:ORAL LD50(RA
T): 2.1-4.6 G/KG

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Health Hazards Acute and Chronic:SKIN: REPEATED OR PROLONGED CONTACT
MAY CAUSE DRYING OF THE SKIN AND DERMATITIS. EYES: VAPOR AND LIQUID
ARE MODERATELY IRRITATING TO THE EYES. INHALATION: VAPORS CAN CAUSE
IRRITATION OR THE RESPIRATORY TRACT. HIGH CONCENTRATIONS CAN CAUSE
HEADACHE, NAUSEA, WEAKNESS, LIGHTHEADEDNESS AND STUPOR (CNS
DEPRESSION). DELAYED/LONG TERM EFFECTS: PROLONGED EXPOSURE TO HIGH
CO

CONCENTRATION CAN CAUSE CENTRAL NEUROLOGICAL DEPRESSION AND EEG
ABNORMALITIES.

Effects of Overexposure:ACCIDENTAL EXPOSURE HAS BEEN REPORTED TO CAUSE
DEPRESSION OF THE CENTRAL NERVOUS SYSTEM AND GASTROINTESTINAL
DISTURBANCES. SYMPTOMS MAY INCLUDE: ABDOMINAL PAIN, HEADACHE
DIZZINESS, WEAKNESS, NAUSEA, VOMITING, LOSS OF COORDINATION AND
UNCONSCIOUSNESS.

Medical Cond Aggravated by Exposure:SIGNIFICANT EXPOSURE TO THIS
CHEMICAL MAY ADVERSELY AFFECT PEOPLE WITH CHRONIC DISEASE
OF THE
CENTRAL NERVOUS SYSTEM.

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First Aid Measures
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First Aid:SKIN: REMOVE CONTAMINATED CLOTHING AND WASH CONTAMINATED SKIN
WITH LARGE AMOUNTS OF SOAP AND WATER. IF IRRITATION PERSISTS
CONTACT A PHYSICIAN. EYES: FLUSH EYES WITH WATER FOR AT LEAST 15
MINUTES. CONTACT A PHYSICIAN IMMEDIATELY. INHALATION: REMOVE
PATIENT FROM CONTAMINATED AREA. IF BREATHING HAS STOPPED, GIVE
ARTIFICIAL RESPIRATION, THEN OXYGEN IF NEEDED. CAN

TACT A PHYSICIAN

IMMEDIATELY. INGESTION: PATIENT SHOULD BE MADE TO DRINK LARGE QUANTITIES OF WATER. DO NOT INDUCE VOMITING. CONTACT A PHYSICIAN IMMEDIATELY.

===== Fire Fighting Measures =====

Flash Point Method:CC

Flash Point:=-15.6C, 60.1F

Lower Limits:1.2

Upper Limits:8

Extinguishing Media:USE AQUEOUS FILM FORMING FOAM FOR LARGE FIRES. USE CO2 OR DRY CHEMICAL FOR SMALL FIRES. WATER MAY BE INEFFECTIVE BUT SHOULD BE USED TO COOL FIRE EXPOSE

D STRUCTURES & VESSELS.

Fire Fighting Procedures:WATER SPRAY CAN BE USED TO REDUCE THE INTENSITY OF FLAMES & TO DILUTE SPILLS TO NONFLAMMABLE MIX. IF EXPOSED TO VAPORS/PRODUCTS OF COMBUSTION, WEAR FULL FIRE-FIGHTING TURNOUT GEAR & SELF CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE IN POSITIVE PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard:KEEP PERSONNEL REMOVED FROM & UPWIND OF FIRE. OXIDIZING CHEMICALS MAY ACCELERATE THE BURNING RATE I

N A FIRE

SITUATION. *VAPOR IS HEAVIER THAN AIR AND CAN TRAVEL CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. MATERIAL CREATES A SPECIAL HAZARD BECAUSE IT FLOATS ON WATER.

===== Accidental Release Measures =====

Spill Release Procedures:ELIMINATE IGNITION SOURCES. CONTAINS SPILL WITH DIKES OF SOIL OR NON-COMBUSTIBLE ABSORBENT TO MINIMIZE CONTAMINATED AREA. IF FIRE POTENTIAL EXISTS, BLANKET SPILL WITH ALCOHOL-TYPE AQUEOUS FULM-F

FORMING FOAM. AVOID RUN-OFF INTO STORM

SEWERS & DITCHES LEADING TO WATERWAYS. IF REQUIRED, NOTIFY STATE & LOCAL AUTHORITIES. PLACE LEAKING CONTAINER IN WELL-VENTILATED AREA. *SEE OTHER INFO.

===== Handling and Storage =====

Handling and Storage Precautions:HANDLING- KEEP CONTAINERS CLOSED WHEN NOT IN USE. ALWAYS OPEN CONTAINERS SLOWLY TO ALLOW ANY EXCESS PRESSURE TO VENT. STORAGE-KEEP ALL CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. STO

RE OUT OF DIRECT SUNLIGHT & ON AN IMPERMEABLE FLOOR. DO NOT STORE WITH INCOMPATIBLE MATERIALS.

Other Precautions:HANDLING-ELECTRICAL EQUIPMENT & CIRCUITS IN ALL STORAGE & HANDLING AREAS MUST CONFORM TO REQUIREMENTS OF NATIONAL ELECTRICAL CODE (ARTICLE 500 & 501) FOR HAZARDOUS LOCATION. THIS PRODUCT MAY GENERATE A STATIC CHARGE. GROUND/BOND EQUIPMENT WHEN TRANSFERRING MATERIAL TO PREVENT STATIC ACCUMULATION.

===== Exposure Controls/Personal Protection =====
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Respiratory Protection:BASED ON WORKPLACE CONTAMINATE LEVE & WORKING LIMITS OF THE RESPIRATOR, USE A RESPIRATOR APPROVED BY NIOSH/MSHA. THE FOLLOWING IS THE MINIMUM RECOMMENDED EQUIPMENT FOR AN ACCEPTABLE LEVEL OF EXPOSURE. FOR ESCAPE: USE SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OR ANY RESPIRATOR SPECIFICALLY APPROVED FOR ESCAPE.

Ventilation:LOCAL VENTILATION IS USUALLY PREFERRED. USE WITH ADEQUATE VENTILATION.

Protective Gloves:IMPERVIOUS GLOVES: THE RECOMMENDED MATERIAL OF CONSTRUCTION IS:NITRILE RUBBER.

Eye Protection:WEAR CHEMICAL GOGGLES WHEN THERE IS A REASONABLE CHANCE OF EYE CONTACT.

Other Protective Equipment:WEAR IMPERVIOUS CLOTHING TO PREVENT REPEATED OR PROLONGED CONTACT. THE RECOMMENDED MATERIAL OF CONSTRUCTION IS: NITRILE RUBBER.

Work Hygienic Practices:WASH THOROUGHLY WITH SOAP/ WATER AFTER HANDLING. DECONTAMINATE SOILED CLOTHES THOROUGHLY BEFORE RESUE. DESTROY CONTAMINATED LEATHER CLOTHING. AVOID BREATHING VAPOR & CONTACT WITH EYES, SKIN,CLOTHES.

Supplemental Safety and Health
ENGINEERING-GENERAL OR DILUTION VENTILATION IS FREQUENTLY INSUFFICIENT AS THE SOLE MEANS OF CONTROLLING EMPLOYEE EXPOSURE. LOCAL VENTILATION IS USUALLY PREFERRED. EXPLOSION-PROOF EQUIPMENT (FOR EXAMPLE, FANS, SWITCHES, GROUNDED DUCTS) SHOULD BE USED IN MECHANICAL VENTILATION SYSTEMS.

===== Physical/Chemical Properties =====

HCC:F2
Boiling Pt:=116.C, 240.8F
Melt/Freeze Pt:=

-50.C, -58.F

Vapor Pres:14.9 MMHG

Vapor Density:3.46

Spec Gravity:0.801

Evaporation Rate & Reference:1.54 (N-BUAC=1)

Solubility in Water:1.95 PER BY WT @ 20 C

Appearance and Odor:COLORLESS LIQUID, FAINT KETONIC AND CAMPHOR ODOR.

Percent Volatiles by Volume:100

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

KEEP AWAY FROM CAUSTIC SODA & OTHER STRONG ALKALIS, HYDROCHLORIC, SULFURIC & OTHER STRONG INORGANIC ACIDS, AMINES, & O

XIDIZING AGENTS

SUCH AS PEROXIDES, NITRIC ACID, PERCHLORIC ACID, CHROMIC ACID, CHROMIUM TRIOXIDE, COPPER

Stability Condition to Avoid:HEAT, SPARKS, FLAME.

Hazardous Decomposition Products:CARBON MONOXIDE.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information:ORAL LD50-2.1-4.6 G/KG(RATS); SLIGHTLY TOXIC TO ANIMALS. DERMAL LD50:>20 ML/KG (RABBITS); PRACTICALLY NON-TOXIC TO ANIMALS & ESSENTIA

LLY NON-IRRITATING TO RABBITS. INHALATION

LC50:>3000 PPM (RATS, 6 H R): SLIGHTLY TOXIC TO ANIMALS BASED ONLACK OF MORTALITY IN A REPEATED EXPOSURE STUDY AT THIS CONCENTRATION. EYE CONTACT: VAPOR & LIQUID ARE MODERATELY IRRITATING TO THE EYES. MUTAGENICITY: NOT MUTAGEN IC IN MOST IN VITRO AND IN VIVO TESTS. REPRODUCTION: DEVELOPMENTAL TOXICITY WAS OBSERVED IN RODENTS REPEATEDLY TO A VAPOR CONCENTRATION WHICH WAS MATERNALLY TOXIC (3000PPM). SIGNIFICANT EFFECTS WERE N OT

SEEN AT

300 OR 1000PPM.

===== Ecological Information =====

Ecological:ECOTOXICITY: METHYL ISOBUTYL KETONE EXHIBITS LOW ACUTE TOXICITY TO AQUATIC SPECIES. THE 96-HOUR LC50 FOR THE FATHEAD MINNOW IS 505-540PPM. THE 24-HR LC50 VALUES FOR GOLDFISH & BRINE SHRIMP ARE 360-460 & 1230PPM, RESPECTIVELY. THE 48-HR LC50 VALUE FOR THE CLAWED TOAD (XENOPUS LAEVIS) IS 656PPM. THE 24-HR EC50 FOR THE WATER FLEA (DAPHNID) IS 474-3682PPM. THE TOXICITY T

THRESHOLD FOR

GREEN ALGAE, EUGLE NOID & BLUE-GREEN ALGAE ARE 725, 447 & 136PPM, RESPECTIVELY. BIOACCUMULATION: THE ESTIMATED LOG OCTANOL/WATER PARTITION COEFFICIENT FOR METHYL ISOBUTYL KETONE IS 1.19. THIS SUGGESTS A LOW POTENTIAL TO BIOCONCENTRATE IN AQUATIC ORGANISMS.

===== Disposal Considerations =====

Waste Disposal Methods:DISPOSE OF SPILLED MATERIAL IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS FOR HAZARDOUS WASTE. RECOMMENDED METHODS ARE INCINERATION OR BIOLOGICAL TREATMENT AT A FEDERALLY OR STATE-PERMITTED DISPOSAL FACILITY. NOTE THAT THIS INFORMATION APPLIES TO THE MATERIALS AS MANUFACTURED.

===== MSDS Transport Information =====

Transport Information:SHIPPIH NAME: METHYL ISOBUTYL KETONE. HAZRD CLASS: 3, FLAMMABLE LQIUID. UNITED NATIONS NO.: UN1245. PACKING GROUP: II. NORT AMERICA ER GUIDE: 127. DOT REPORTABLE QUANTITY (RQ): 5000 LB/2270 KG.

===== Regulatory Information =====

SARA Title III Information:SARA 304, METHYL ISOBUTYL KETONE 99% (108-10-1). SARA 311, ACUTE HEALTH-NO, CHRONIC HEALTH-NO, FIRE-YES, SUDDEN RELEASE OF PRESSURE-NO, REACTIVE-NO.

Federal Regulatory Information:METHYL ISOBUTYL KETONE* OSHA HAZARDOUS ACCORDING TO 29 CFR 1910.1200. EPA HAZARDOUS WASTE CODE(S): U161. WE CERTIFY THAT ALL COMPONENTS ARE EITHER ON THE TSCA INVENTORY OR QUALIFY FRO AN EXEMPTION. TS CA 12B. THE FOLLOWING ARE LISTED:

METHYL ISOBUTYL KETONE 99% (108-10-1). ENVIRONMENTAL: CERCLA, METHYL ISOBUTYL KETONE 99% (108-10-1).

State Regulatory Information:THE FOLLOWING CHEMICALS ASSOCIATED WITH THE PRODUCT ARE SUBJECT TO THE RIGHT-TO-KNOW REGULATIONS IN THESE STATES: METHYL ISOBUTYL KETONE (108-10-1): CT, FL, IL, MA, NJ, NY, PA, RI.

===== Other Information =====

===== Disclaimer (provi

ded with this information by the compiling agencies):

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