

CELANESE LTD -- METHYL ETHYL KETONE -- 6810-00-281-2785

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

Product ID:METHYL ETHYL KETONE

MSDS Date:03/23/2001

FSC:6810

NIIN:00-281-2785

Status Code:A

MSDS Number: CLHHY

=== Responsible Party ===

Company Name:CELANESE LTD

Address:1601 W LBJ FREEWAY

Box:819005

City:DALLAS

State:TX

ZIP:75389-0005

Country:US

Info Phone Num:972-443-4000

Emergency Phone Num:(800)424-930

0

Resp. Party Other MSDS Num.:61

Chemtec Ind/Phone:(800)424-9300

CAGE:1EEP4

=== Contractor Identification ===

Company Name:CELANESE LTD

Address:1601 W LBJ FREEWAY

Box:819005

City:DALLAS

State:TX

ZIP:75381-9005

Country:US

Phone:972-443-4000

CAGE:1EEP4

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:0XRBO

=====  
Composition/Information on Ingredients  
=====

Ingred Name:METHY

L ETHYL KETONE  
CAS:78-93-3  
RTECS #:EL6475000  
= Wt:99.5  
OSHA PEL:200 PPM  
ACGIH TLV:200 PPM  
ACGIH STEL:300 PPM  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

===== Hazards Identification =====

LD50 LC50 Mixture:ORAL RAT LD50: 2.6-5.6 G/KG  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:TARGET ORGANS: CNS, EYES, RESPIRATORY TRACT, SKIN. SKIN: MAY CAUSE SKIN IRRITATION. EYES: EXPOSURE TO VAPORS & LIQUID CAUSES EYE IRRITATION. INHALATION: MAY CAUSE RESPIRATORY TRACT IRRITATION, CENTRAL NERVOUS SYSTEM DEPRESSION. INGESTION: ESSENTIALLY NON-TOXIC, MAY CAUSE GI TRACT IRRITATION AND/OR CENTRAL NERVOUS SYSTEM DEPRESSION. CHRONIC: NO EVIDENCE OF REPRODUCTIVE EFFECTS, CARCINOGENICITY OR BIRTH DEFECTS.  
Explanation of Carcinogenicity:NO EVIDENCE OF CARCINOGENICITY.  
Effects of Overexposure:SKIN: DRYING, CRACKING OR INFLAMMATION OF SKIN. EYES: EYE IRRITATION, BURNING SENSATION, PAIN, WATERING, AND/OR CHANGE OF VISION. INHALATION: CNS DEPRESSION WITH NAUSEA, DIZZINESS, HEADACHE, STUPOR, UNCOORDINATED OR STRANGE BEHAVIOR OR UNCONSCIOUSNESS; RESPIRATORY IRRITATION WITH NASAL DISCHARGE, HOARSENESS, COUGHING, CHEST PAIN, BREATHING DIFFICULTY. INGESTION: CNS DEPRESSION WITH NAUSEA, HEADACHE, MENTAL SLUGGISHNESS; GI TRACT IRRITATION WITH NAUSEA, VOMITING, LOSS OF APPETITE, DIARRHEA.  
Medical Cond Aggravated by Exposure:A  
CUTE OR CHRONIC DISEASE OF THE  
RESPIRATORY TRACT, SKIN, EYES, CNS SYSTEM.

===== First Aid Measures =====

First Aid:SKIN: IMMEDIATELY SLUSH WITH WATER. REMOVE CONTAMINATED CLOTHES/SHOES. CALL PHYSICIAN IF IRRITATION DEVELOPS/PERSISTS.  
EYES: IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. IF EASY TO DO, REMOVE CONTACT LENSES. GET IMMEDIATE MEDICAL ATTENTION.  
INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.

IF BREATHING DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION. INGESTION: CALL PHYSICIAN IMMEDIATELY. DO NOT INDUCE VOMITING UNLESS DIRECTED BY PHYSICIAN. NOTHING BY MOUTH IF UNCONSCIOUS. CALL A PHYSICIAN.

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

Flash Point Method:CC

Flash Point:=-8.7C, 16.F

Autoignition Temp:=403.9C, 759.F

Lower Limits:1.8

Upper Limits:10

Extinguishing Media:USE ALCOHOL TYPE AQUEOUS FILM FORMING FOAM FOR LARGE FIRES. USE CO2 OR DRY CHEMICAL FOR SMALL FIRES.

Fire Fighting Procedures:WATER MAY BE INEFFECTIVE BUT SHOULD BE USED TO COOL FIRE-EXPOSED STRUCTURES & VESSELS. USE WATER SPRAY FOR LARGE FIRES. WATER SPRAY MAY BE USED TO REDUCE THE INTENSITY OF FLAMES & DILUTE SPILLS TO NON-FLAMMABLE MIXTURE. WEAR FULL FIRE FIGHTING TURN-OUT GEAR & NIOSH-APPROVED SCBA.

Unusual Fire/Explosion Hazard:VAPOR IS HEAVIER THAN AIR & CAN TRAVEL CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION& FLASH BACK. PRODUCT OF COM

BUSTION: CARBON MONOXIDE. NFPA: HEALTH:1, FLAMMABILITY:3, REACTIVITY:0.

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

Spill Release Procedures:ELIMINATE IGNITION SOURCES. WEAR APPROPRIATE PERSONAL PROTECTIVE GEAR. CONTAIN SPILL. WATER FOG MAY REDUCE VAPORS. NOTIFY AUTHORITIES. PLACE LEAKING CONTAINERS IN WELL-VENTILATED AREA. CLEAN SMALL SPILLS WITH NON-FLAMMABLE ABSORBENT. CLEAN-UP BY VACUUMING OR SWEEPING. KEEP UNNECESSARY PEOPLE AWAY. ISOLATE &

DENY ENTRY. STAY UPWIND. ISOLATE FOR 800 METERS OR 0.5 MILES ALL DIRECTIONS.

Neutralizing Agent:NO DATA PROVIDED BY MANUFACTURER

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

Handling and Storage Precautions:USE WITH ADEQUATE VENTILATION. KEEP CONTAINERS CLOSED WHEN NOT IN USE. ALWAYS OPEN CONTAINERS SLOWLY TO ALLOW EXCESS PRESSURE TO VENT. AVOID BREATHING VAPOR. AVOID CONTACT WITH SKIN, EYES OR CLOTHES.

Other Precautions:KEEP ALL CONTAINERS TIGHTLY CLOSED

WHEN NOT IN USE.

STORE OUT OF DIRECT SUNLIGHT & ON AN IMPERMEABLE FLOOR. DO NOT STORE WITH INCOMPATIBLE MATERIALS. PRODUCT MAY GENERATE STATIC DISCHARGE. GROUND/BOND EQUIPMENT WHEN TRANSFERRING MATERIAL.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:BASED ON WORKPLACE CONTAMINANT LEVEL AND WORKING LIMITS OF THE RESPIRATOR, USE A RESPIRATOR APPROVED BY NIOSH.

Ventilation:LOCAL VENTILATION IS PREFERRED. EXPLOSION-PROOF EQUIPMENT

SHOULD BE USED IN MECHANICAL VENTILATION SYSTEM.

Protective Gloves:BUTYL RUBBER IS RECOMMENDED.

Eye Protection:CHEMICAL GOGGLES.

Other Protective Equipment:SAFETY SHOWER AND EYEBATH SHOULD BE READILY AVAILABLE.

Work Hygienic Practices:WASH THOROUGHLY WITH SOAP & WATER AFTER HANDLING. DECONTAMINATE SOILED CLOTHING THOROUGHLY BEFORE RE-USE. DESTROY CONTAMINATED LEATHER CLOTHING.

Supplemental Safety and Health

ELECTRICAL EQUIPMENT & CIRCUITS MUST COMPLY WITH NATIONAL ELECTRICAL CODE

(ARTICLE 500 & 501) FOR HAZARDOUS LOCATION.

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

HCC:F2

Boiling Pt:=79.4C, 175.F

Melt/Freeze Pt:=87.C, 188.6F

Vapor Pres:91 MM HG @ 25C

Vapor Density:2.41

Spec Gravity:0.805 @ 20C

Evaporation Rate & Reference:3.3

Solubility in Water:26.8%

Appearance and Odor:CLEAR, COLORLESS, OILY LIQUID; STRONG "KETONE" ODOR

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

CAUSTIC SODA, LIME & OTHER STRONG ALKALIES; HYDR

OCHLORIC, SULFURIC &

OTHER STRONG INORGANIC ACIDS, AMINES & OXIDIZING AGENTS SUCH AS PEROXIDES, NITRIC ACID, PERCHLORIC ACID, CHROMIC ACID, CHROMIUM TRIOXIDE, COPPER OR COPPER

Stability Condition to Avoid:AVOID HEAT, FLAMES, SPARKS AND OTHER SOURCES OF IGNITION.

Hazardous Decomposition Products:THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE OXIDES OF CARBON.

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

Toxicological Information:ACUTE EXPOSURE: EXCESSIVE EX

## POSURE TO MEK

LEADS TO DEPRESSION OF THE CENTRAL NERVOUS SYSTEM. ORAL: SLIGHTLY TOXIC; ORAL LD50 (RAT) = 2.7-5.6 G/KG. INHALATION: SLIGHTLY TOXIC, INHALATION LC50 (RAT) ESTIMATED TO BE >5000 PPM/6 HR. CAUSES IRRITATION OF NASAL PASSAGES & THROAT. SKIN: SLIGHTLY TOXIC; DERMAL LD50 (RABBIT) = 5.0-13 G/KG. CAUSES MILD TO MODERATE SKIN IRRITATION. EYE: LIQUID AND VAPOR CAN CAUSE SEVERE EYE IRRITATION. REPEATED EXPOSURE: MALE & FEMALE RATS EXPOSED TO 0, 1250, 2500 OR

5000 PPM MEK IN AIR 6HRS/5DAY-WEEK/90 DAYS FAILED TO DEMONSTRATE PATHOLOGICAL CHANGES ATTRIBUTED TO MEK IN ORGANS & TISSUES STUDIED.

## ===== Ecological Information =====

Ecological: ECOTOXICITY: MEK HAS LOW TOXICITY TO FISH (LC50 RANGE - 4600-5640 PPM) AND AQUATIC INVERTEBRATES (EC50 RANGE - 1950-8890 PPM). ABOVE 1000 PPM IT MAY INHIBIT GROWTH OF BLUE-GREEN ALGAE. ENVIRONMENTAL FATE: BIODEGRADATION: EXTENSIVE DATA DEMONSTRATE THAT MEK IS READILY BIODEGRADABLE. BIOACCUMULATION: NO DIRECT INFORMATION IS AVAILABLE ON MEK ACCUMULATION IN BIOLOGICAL MATERIAL.

## ===== Disposal Considerations =====

Waste Disposal Methods: DISPOSE OF SPILLED MATERIAL IN ACCORDANCE WITH STATE & LOCAL REGULATIONS FOR HAZARDOUS WASTE. RECOMMENDED METHODS ARE INCINERATION OR BIOLOGICAL TREATMENT AT A FEDERALLY OR STATE-PERMITTED DISPOSAL FACILITY. NOTE: THIS INFORMATION APPLIES TO MATERIAL AS MANUFACTURED; PROCESSING, USE OR CONTAMINATION MAY MAKE THIS INFORMATION INAPPROPRIATE.

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

Transport Information: US DOT: SHIPPING NAME: ETHYL METHYL KETONE. HAZARD CLASS: 3 (FLAMMABLE LIQUID). UN/NA NUMBER: UN1993. PACKING GROUP: II. DOT REPORTABLE QUANTITY (RQ): 5000 LBS/2270 KG (METHYL ETHYL KETONE). EMERGENCY RESPONSE GUIDE: 127. ICAO/IATA: SHIPPING NAME: METHYL ETHYL KETONE. HAZARD CLASS: 3 (FLAMMABLE LIQUID).

LABEL:FLAMMABLE LIQUID. UN/NA NUMBER: UN1993. PACKING GROUP: II.  
IMDG: SHIPPING NAME: METHYL ETHYL KETONE. HAZARD CLASS: 3.2  
(FLAMMABLE LIQUID). UN/NA NUMBER: UN1993. PACKING GROUP: II. MFAG  
TABLE NO.: 300. EMS NO.: 3-06.

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

SARA Title III Information:EPCRA (SARA TITLE III) SECTION 313: LISTED.  
CERCLA HAZARDOUS SUBSTANCES DATA: LISTED. SARA EHS: LISTED. SARA  
311: ACUTE HEALTH: YES. CHRONIC HEALTH: YES. F  
IRE: YES. SUDDEN  
RELEASE OF PRESSURE: NO. REACTIVE: NO.  
Federal Regulatory Information:TSCA INVENTORY: ALL COMPONENTS ARE  
EITHER ON THE TSCA INVENTORY OR QUALIFY FOR EXEMPTION.  
State Regulatory Information:METHYL ETHYL KETONE, 99.5%, 78-93-3 IS  
SUBJECT TO THE STATE RIGHT-TO-KNOW REGULATIONS ARE LISTED ALONG  
WITH THE APPLICABLE STATE(S): PENNSYLVANIA: LISTED, NEW YORK:  
LISTED; NEW JERSEY: LISTED; ILLINOIS: LISTED; MASSACHUSETTS:  
LISTED; RHODE ISLAND: LISTED.

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

Disclaimer (provided with this information by the compiling agencies):  
This information is formulated for use by elements of the Department  
of Defense. The United States of America in no manner whatsoever,  
expressly or implied, warrants this information to be accurate and  
disclaims all liability for its use. Any person utilizing this  
document should seek competent professional advice to verify and  
assume responsibility for the suitability of this information to their  
particular situation.