

UNION OIL CO OF CALIFORNIA, CORP. DIV-EASTERN -- 1,1,1-TRICHLOROETHANE,15620 --  
6810-00-551-1487

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

Product ID:1,1,1-TRICHLOROETHANE,15620

MSDS Date:12/01/1989

FSC:6810

NIIN:00-551-1487

MSDS Number: BVTXR

=== Responsible Party ===

Company Name:UNION OIL CO OF CALIFORNIA, CORP. DIV-EASTERN

Address:1345 NORTH MEACHAM ROAD

City:SCHAUMBURG

State:IL

ZIP:60196

Country:US

Info Phone Num:800-356-3129

Emergency Phone Num:202-483-7616/800-424-9300(CHEMTREC)

CAGE:77416

=== Contractor Identification ===

Company Name:UNION OIL CO OF CALIFORNIA, CORP. DIV-EASTERN

Address:1650 EAST GOLF ROAD

Box:City:SCHAUMBURG

State:IL

ZIP:60195

Country:US

Phone:708-619-2644

CAGE:77416

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

Ingred Name:METHYL CHLOROFORM (1,1,1-TRICHLOROETHANE) (SARA III)

CAS:71-55-6

RTECS #:KJ2975000

Fraction by Wt: 94 - 98%

Other REC Li

imits:NONE RECOMMENDED

OSHA PEL:350 PPM

ACGIH TLV:350 PPM/450STEL;9394

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ozone Depleting Chemical:1

Ingred Name:1,4-DIOXANE (DIETHYLENE DIOXIDE) (SARA III)

CAS:123-91-1

RTECS #:JG8225000

Fraction by Wt: 0 - 4%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:S, 100 PPM

ACGIH TLV:S, 25 PPM; 9394

EPA Rpt Qty:100 LBS

DOT Rpt Qty:100 LBS

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

LD50 LC50 Mixture:TLV FOR ME CHLOROFORM IS 350 PPM.

of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:TARGET ORGANS:EYE, SKIN, LUNG, CNS.

ACUTE- INHALATION OF HIGH CONCENTRATIONS OF VAPORS MAY CAUSE CNS DEPRESSION & LUNG DISORDERS. MAY CAUSE EYE & SKIN IRRITATION. IF INGESTED IN EXCESSIVE QUANTITIES, MAY CAUSE GI DISTURBANCES & CNS DEPRESSION. CHRONIC- BURNING & DRYING OF SKIN, LUNG DISORDERS, (LIVER DAMAGE IN ANIMALS)

Explanation of Carcinogenicity:NONE

Effects of Overexposure:STINGING, TEARING, REDNESS OF EYES; HEADACHE, DROWSINESS, DIZZINESS, LOSS OF COORDINATION, CARDIAC ARRHYTHMIAS, IRRITATION TO EYES, SKIN, RESPIRATORY AND GASTROINTESTINAL TRACTS; DRYING, CRACKING, BURNING AND REDNESS OF SKIN; BRAIN AND CNSDAMAGE; FATIGUE

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN DISORDERS, EYE PROBLEMS OR IMPAIRED LIVER, HEART OR RESPIRATORY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS PRODUCT.

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

First Aid:GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. SKIN:WASH WITH SOAP & WATER. EYE:FLUSH WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN. INHALED:REMOVE TO FRESH AIR. PROVIDE OXYGEN/CPR IF NEEDED. ORAL:ASPIRATION HAZARD. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH. DO NOT LEAVE VICTIM UNATTENDED. SEEK MEDICAL ATTENTION IMMEDIATELY.

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

Flash Point:NONE

Extinguishing Media:CARBON DIOXIDE, WATER SPRAY, HALON, FOAM, DRY CHEMICAL. WATER SPRAY MAY BE USED TO KEEP FIRE EXPOSED CONTAINERS COOL.

Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard:CONCENTRATED VAPORS CAN BE IGNITED BY HIGH INTENSITY HEAT SOURCE OR FLAME. TOXIC AND CORROSIVE GASES ARE

FORMED ON CONTACT WITH FLAMES OR HOT GLOWING SURFACES.

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

Spill Release Procedures:WEAR PROTECTIVE EQUIPMENTS. VENTILATE AREA. REMOVE OPEN FLAMES. DIKE TO CONTAIN SPILL. PICK UP WITH ABSORBENT MATERIAL SUCH AS SAND OR VERMICULITE. SWEEP INTO APPROVED CONTAINERS FOR DISPOSAL. AVOID CONTAMINATING ENVIRONMENTS. DO NOT FLUSH TO SEWERS.

Neutralizing Agent:NOT RELEVANT

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

Handling and Storage Precautions:STORE IN CLOSED CONTAINERS, IN VENTILATED AREA AWAY FROM OPEN FLAMES, RED HOT SURFACES, HIGH INTENSITY ULTRA VIOLET LIGHT AND INCOMPATIBLE MATERIALS.

Other Precautions:KEEP OUT OF REACH OF CHILDREN. FOR INDUSTRIAL USE ONLY. AVOID BREATHING VAPORS. AVOID CONTACT WITH EYES AND SKIN. VAPORS HEAVIER THAN AIR AND WILL COOLECT IN LOW AREAS. DO NOT ENTER SUCH AREAS UNLESS SPECIAL BREATHING APPARATUS IS USED.

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

Respiratory Protection:IF TLV IS EXCEEDED OR IN EVENT OF A SPILL, WEAR NIOSH APPROVED SUPPLIED AIR RESPIRATOR. USE SELF-CONTAINED BREATHING APPARATUS OPERATED IN PRESSURE DEMAND MODE FOR WORK PERFORMED IN CONFINED PLACES. REFER TO 29CFR 1910.134.

Ventilation:USE LOCAL EXHAUST OR DILUTION VENTILATION AS APPROPRIATE TO CONTROL EXPOSURE TO BELOW PERMISSIBLE LIMITS.

Protective Gloves:NITRILES, PVA

Eye Protection:SPLASH PROOF GOGGLES WHEN HANDLING LIQ.

Other Protective Equipment:BOOTS, APRON OR CHEMICAL SUITS TO MINIMIZE EXPOSURE. EYE WASH STATION & SAFETY SHOWER RECOMMENDED.

Work Hygienic Practices:WASH THOROUGHLY AFTER USE AND BEFORE EATING, DRINKING OR USING TOILET FACILITIES. DO NOT WEAR CONTACT LENSES.

Supplemental Safety and Health

NOTE TO PHYSICIAN:INHALATION OF HIGH CONCENTRATIONS OF 1,1,1-TRICHLOROETHANE FOR A SHORT PERIOD OF TIME CAN INDUCE CARDIAC MUSCLE SENSITIZATION TO CIRCULATING CATECHOLAMINES RE

SULTING IN

POTENTIALLY FATAL HEART ARRHYTHMIAS. DO NOT GIVE EPINEPHRINE OR  
SIMILAR DRUGS. DO NOT ALLOW SUCH PERSON EXERCISES VIGOROUSLY FOR 24  
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===== Physical/Chemical Properties =====

HCC:T4

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:B.P. Text:160F - 190F

Vapor Pres:134 @ 68F

Vapor Density:4.6

Spec Gravity:1.290

Evaporation Rate & Reference:6.0 (N-BUTYL ACETATE=1)

Solubility in Water: