

UNION OIL CO OF CALIFORNIA UNION CHEMICALS DIV -- 1,1,1-TRICHLOROETHANE (PROD CODE NO 15620) -- 6810-00-476-5613

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

Product ID:1,1,1-TRICHLOROETHANE (PROD CODE NO 15620)

MSDS Date:12/01/1989

FSC:6810

NIIN:00-476-5613

MSDS Number: BDZTN

=== Responsible Party ===

Company Name:UNION OIL CO OF CALIFORNIA UNION CHEMICALS DIV

Address:1900 E GOLF ROAD

City:SCHAUMBURG

Stat

e:IL

ZIP:60194-5021

Country:US

Info Phone Num:312-885-5450

Emergency Phone Num:800-424-9300 TRAN 800-356-3129 MED

Preparer's Name:PETROCHEMICAL GROUP

CAGE:DO716

=== Contractor Identification ===

Company Name:UNION OIL CO OF CALIF;UNION CHEMICAL DIV

Address:1345 NORTH MEACHAM ROAD

City:SCHAUMBURG

State:IL

ZIP:60196

Country:US

Phone:312-885-5450

CAGE:DO716

Company Name:UNOCAL CHEMICALS DIV.,UNION OIL OF CALIFORNIA

Address:1345 N MEACHAM

Box:City:SCHAUMBURG

State:IL

ZIP:60196

Phone:312-490-2500/800

-424-9300(CHEMTREC)

CAGE:94684

===== 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 Limits:NONE SPECIFIED

OSHA PEL:350 PPM/450 STEL

ACGIH TLV:350 PPM/450STEL;9192

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 Li

imits:NONE SPECIFIED
OSHA PEL:S, 100 PPM
ACGIH TLV:S, 25 PPM; 9293
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

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

LD50 LC50 Mixture:ORAL LD50 (RAT) = 10300 MG/KG
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:MAY CAUSE MILD EYE & SKIN IRRITATION.
BREATHING HIGH CONCENTRATIONS MAY CAUSE RESPIRATORY TRACT
IRRITATION & CNS DEPRESSION
AND DEATH. INGESTION OF EXCESSIVE
QUANTITIES MAY CAUSE NAUSEA, VOMITING, DIA RRHEA, & CNS DEPRESSION.
REPEATED AND PROLONGED OVEREXPOSURE MAY RESULT IN SEVERE SKIN,
PERMANENT BRAIN OR CNS DAMAGE.
Explanation of Carcinogenicity:THERE IS LIMITED EVIDENCE OF LIVER
DAMAGE IN LONG TERM ANIMAL STUDIES. RELEVANCE OF THESE FINDINGS TO
HUMANS IS UNKNOWN.
Effects of Overexposure:DIRECT EYE CONTACT WITH LIQUID OR VAPOR MAY
CAUSE STINGING, TEARING AND REDNESS. SKIN CONTACT MAY CAUSE
REDNESS, BURNING, DRYING, & CRACKING. INHALATION MAY CAUSE
HEADACHE, DROWSINESS, DIZZINESS, LOSS OF COORDINATION, AND
FATIGUE. INGESTION MAY CAUSE NAUSEA, VOMITING, DIARRHEA, AND SIGNS
OF NERVOUS SYSTEM DEPRESSION.
Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN AND
LUNG DISORDERS MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS
MATERIAL.

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

First Aid:INHALATION: REMOVE TO FRESH AIR. GIV
E MOUTH-TO-MOUTH
RESUSCITATION IF NOT BREATHING. GIVE OXYGEN IF BREATHING IS
DIFFICULT. GET MEDICAL ATTENTION. EYES: FLUSH WITH RUNNING WATER
FOR 15 MINUTES WHILE H OLDING EYELID. GET MEDICAL ATTENTION. SKIN:
WASH WITH PLENTY OF SOAP & WATER. REMOVE CONTAMINATED CLOTHING. GET
MEDICAL ATTENTION. INGESTED: DO NOT INDUCE VOMITING. GET MEDICAL
ATTENTION IMMEDIATELY.

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

Flash Point:NONE
Lower Limits:7.5
Upper

Limits:12.5

Extinguishing Media:USE WATER FOG, CARBON DIOXIDE, FOAM, HALON, OR DRY CHEMICAL.

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY. CONTAIN RUNOFF.

Unusual Fire/Explosion Hazard:IF CONTAINER IS NOT PROPERLY COOLED, IT MAY EXPLODE IN THE HEAT OF A FIRE. VAPORS ARE HEAVIER THAN AIR AND MAY ACCUMULATE IN LOW AREAS.

===== Accidental Release

Measures =====

Spill Release Procedures:STAY UPWIND OF SPILL. ELIMINATE ALL SOURCES OF IGNITION. VENTILATE INDOOR AREAS. DIKE WITH INERT MATERIAL TO RETAIN LIQUID. KEEP OUT OF DRAIN. DO NOT FLUSH AREA WITH WATER. ABSORB SMALL AMOUNTS. VACUUM OR PUMP LARGE AMOUNTS. RESIDUE EVAPORATES FAST.

Neutralizing Agent:NONE

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

Handling and Storage Precautions:USE & STORE IN A COOL, DRY, WELL-VENTILATED LOC

ATION, AWAY FROM ANY AREA WHERE THE FIRE HAZARD MAY BE ACUTE. KEEP CONTAINERS CLOSED WHEN NOT IN USE.

Other Precautions:DO NOT USE WITH ALUMINUM. READ AND FOLLOW DIRECTIONS ON LABEL. DO NOT REUSE CONTAINERS. DO NOT ENTER CONFINED SPACES SUCH AS TANKS OR PITS WITHOUT FOLLOWING PROPER ENTRY PROCEDURES SUCH AS ASTM D-4276 . "EMPTY" CONTAINERS CAN BE DANGEROUS.

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

Respiratory Protection:IN HIGH VAPOR AREA, USE NIOSH/M SHA APPROVED AIR

SUPPLIED RESPIRATOR. DO NOT USE A CHEMICAL CARTRIDGE RESPIRATOR.

Ventilation:LOCAL EXHAUST SYSTEM RECOMMENDED TO CONTROL VAPORS BELOW 50% OF TLV.

Protective Gloves:NEOPRENE OR PVA GLOVES RECOMMENDED.

Eye Protection:USE CHEMICAL SAFETY SPLASH GOGGLES.

Other Protective Equipment:APRON AND WORK CLOTHING TO MINIMIZE EXPOSURE. EYE WASH STATION & SAFETY SHOWER RECOMMENDED.

Work Hygienic Practices:WASH THOROUGHLY AFTER HANDLING. DO NOT WEAR CONTAMINATED CLOTHING OR SHOE

S. USE GOOD PERSONAL HYGIENE PRACTICE.

Supplemental Safety and Health

TARGET ORGANS ARE SKIN, CNS, CVS, AND EYES. EMPTY DRUMS SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED AND PROMPTLY SHIPPED TO THE SUPPLIER OR A DRUM RECONDITIONER. ALL OTHER CONTAINERS SHOULD BE DISPOSED OF IN AN ENVIRONMENTALLY SAFE MANNER AND IN ACCORDANCE WITH GOVERNMENTAL REGULATIONS.

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

HCC:T4

Boiling Pt:B.P. Text:165F,74C

Melt/Freeze Pt:

M.P/F.P Text:-23F,-31C

Vapor Pres:134 MM HG

Vapor Density:4.6

Spec Gravity:1.29

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

Solubility in Water:NEGLIGIBLE

Appearance and Odor:CLEAR, COLORLESS LIQUID WITH FAINT, BENZENE-LIKE ODOR.

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS, STRONG ACIDS, STRONG ALKALIES, SELECTED AMINES, AND REACTIVE METALS SUCH AS AL, K, NA, ETC.

Stability Condition to Avoid:AVOID HIGH PRESSURE IN ALUMINUM SYSTEMS.

Hazardous Decomposition Products:WHEN INVOLVED IN FIRE, 1,1,1-TRICHLOROETHANE EMITS HIGHLY TOXIC AND IRRITATING HYDROGEN CHLORIDE AND PHOSGENE FUMES.

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

Waste Disposal Methods:DISPOSE OF PRODUCT IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

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ation 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.