

UNION OIL CO OF CALIFORNIA UNOCAL CHEMICALS DIV -- 11135 LACTOL SPIRITS --
6810-00-238-8119

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

Product ID:11135 LACTOL SPIRITS

MSDS Date:12/08/1993

FSC:6810

NIIN:00-238-8119

MSDS Number: BWSDN

=== Responsible Party ===

Company Name:UNION OIL CO OF CALIFORNIA UNOCAL CHEMICALS DIV

Address:1201 W 5TH ST

Box:60455

City:LOS ANGELES

State:CA

ZIP:90060

Country:US

Info Pho

ne Num:213-977-7589 OR 800-967-7601

Emergency Phone Num:800-424-9300(CHEMTREC)/503-641-3222

CAGE:23034

=== Contractor Identification ===

Company Name:76 PRODUCTS CO

Address:1201 W 5TH ST

Box:City:LOS ANGELES

State:CA

ZIP:90017

Country:US

Phone:213-977-7589

CAGE:23034

Company Name:HOC INDUSTRIES, INC

Address:3511 N. OHIO

Box:2609

City:WICHITA

State:KS

ZIP:67219

Country:US

Phone:316-838-4663

CAGE:0A9L8

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

Ingred Name:CYCLOHEXANE (

SARA III)
CAS:110-82-7
RTECS #:GU6300000
Fraction by Wt: 1-3%
Other REC Limits:NONE SPECIFIED
OSHA PEL:300 PPM
ACGIH TLV:300 PPM, 9192
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:N-HEPTANE
CAS:142-82-5
RTECS #:MI7700000
Other REC Limits:NONE SPECIFIED
OSHA PEL:500 PPM/500 STEL
ACGIH TLV:400 PPM/500STEL;9293

Ingred Name:METHYLCYCLOHEXANE
CAS:108-87-2
RTECS #:GV6125000
Other REC Limits:NONE SPECIFIED
OSHA PEL:500 PPM
ACGIH TLV:400 PPM; 9293

Ingred Name:TOLUENE (SARA III)
CAS:108-88-3
RTECS #:XS5250000
Fraction by Wt: 10-18%
Other REC Limits:NONE SPECIFIED
OSHA PEL:200 PPM/150 STEL
ACGIH TLV:50 PPM; 9293
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:C6-C8 PARAFFINS AND CYCLOPARAFFINS
Other REC Limits:NONE SPECIFIED
OSHA PEL:NONE ESTABLISHED
ACGIH TLV:NONE ESTABLISHED

Ingred Name:SOLVENT NAPHTHA, LIGHT ALIPHATIC (VM & P NAPHTHA)
CAS:64742-89-8
Other REC Limits:NONE RECOMMENDED

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

Routes of Entry: Inh

alation:YES Skin:NO Ingestion:YES

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

Health Hazards Acute and Chronic:ACUTE: CAUSES SKIN & EYE IRRITATION.

ASPIRATION HAZARD IF SWALLOWED; CAN ENTER LUNGS & CAUSE DAMAGE. LOW TO MODERATE DEGREE OF TOXICITY IF INHALED. OR SWALLOWED. CHRONIC: REPEATED & PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN & NERVOUS SYSTEM DAMAGE.

Explanation of Carcinogenicity:NO INGREDIENT OF A CONCENTRATION OF 0.1% OR GREATER

IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.

Effects of Overexposure:EYES-IRRITATION, STINGING, WATERING, REDNESS, & SWELLING. SKIN-REDNESS, BURNING, DRYING & CRACKING OF SKIN. INHALED-HEADACHE, DROWSINESS, DIZZINESS, LOSS OF COORDINATION, FATIGUE, IRRITATION OF NOSE/THROAT. INGESTED-IRRITATION OF GI TRACT,NAUSEA, VOMITING, DIARRHEA.

Medical Cond Aggravated by Exposure:PRE-EXISTING SKIN

DISORDERS,RESPIRATORY (ASTHMA-LIKE) DISORDERS,KIDNEY DISORDERS,& LIVER.EXPOSURE

RE MAY CAUSE IRREGULAR HEART BEATS;PERSONS WITH

PRE-EXISTING HEART DISORDERS MAY BE MORE SUSCEPTIBLE.

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

First Aid:INHALATION-REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION. EYE-FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING LID OPEN. GET MEDICAL ATTENTION. SKIN-WASH WITH SOAP & WATER. REMOVE CONTAMINATED CLOTHING. INGESTION-IF CONSCIOUS & ALERT, INDUCE VOMITING UNDER DIRECTION OF DOCTOR OR POISON CONTROL CENTER. GET MEDICAL ATTENTION IMMEDIATELY.

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

Flash Point Method:TCC

Flash Point:20.0F,-6.7C

Autoignition Temp:Autoignition Temp Text:580F

Lower Limits:1.0

Upper Limits:7.0

Extinguishing Media:DRY CHEMICALS, CARBON DIOXIDE, FOAM, HALON. WATER MAY BE AN INEFFECTIVE EXTINGUISHING AGENT.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD WEAR PROTECTIVE CLOTHING AND SELF-CONTAINED BREATHING

HING APPARATUS. ISOLATE DAMAGE AREA, DENY ENTRY. STOP SPILL IF MINIMAL RISK.

Unusual Fire/Explosion Hazard:MATERIAL IS FLAMMABLE, MAY TRAVEL TO DISTANT SOURCE OF IGNITION & FLASHBACK. VAPORS ARE HEAVIER THAN AIR AND MAY COLLECT IN LOW AREAS.

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

Spill Release Procedures:ELIMINATE ALL SOURCES OF IGNITION. USE NON-SPARKING TOOLS. ISOLATE & DENY ENTRY. WEAR PROPER PROTECTIVE GEAR. PREVENT SPILL FROM ENTERING SEWER S, WATERWAYS. ABSORB ONTO APPROPRIATE ABSORBANT MATERIAL. NOTIFY USCG AT 800-424-8802 IF ENTERS WATERWAYS.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN A COOL, DRY, WELL-VENTIATED PLACE AWAY FROM SOURCES OF IGNITION & INCOMPATIBLE MATERIALS. OPEN CONTAINER SLOWLY.

Other Precautions:BOND & GROUND VESSELS DURING TRANSFERS. DO NOT ENTER CONFINED SPACES WITHOUT FOLLOWING ENTRY PROCEDURES IN ASTM D-4276 & 29CFR1910.146. "EMPTY" CONTAINERS RETAIN RESIDUES. DO NOT PRESSURIZE, CUT, WELD , ETC. THEY MAY EXPLODE, CAUSING INJURY.

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

Respiratory Protection:IF ENGINEERING CONTROLS FAIL OR NON-ROUTINE USE OR AN EMERGENCY OCCURS; WEAR AN MSHA/NIOSH APPROVED RESPIRATOR OR AN AIR-SUPPLIED RESPIRATOR OR SCBA, AS REQUIRED. USE IN ACCORDANCE WITH 29 CFR 1910.13 4 AND MANUFACTURER'S RECOMMENDATIONS.

Ventilation:USE ADEQUATE EXPLOSION-PROOF MECHANICAL VENTILATION OR LOCAL EXHAUST TO MAINTAIN EXPOSURE BELOW TLV(S).

Protective Gloves:IMPERVIOUS-NITRILE, BUTYL, VITON.

Eye Protection:SAFETY GLASSES/CHEMICAL SPLASH GOGGLES.

Other Protective Equipment:EYE WASH STATION & SAFETY SHOWER. IMPERVIOUS CLOTHING TO PREVENT REPEATED/PROLONGED SKIN CONTACT.

Work Hygienic Practices:WASH HANDS AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHES BEF

ORE REUSE.

Supplemental Safety and Health

TARGET ORGANS: CENTRAL NERVOUS SYSTEM, KIDNEY, LIVER, HEARING.

INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING & INHALING THIS MATERIAL MAY BE HARMFUL/FATAL. EPA/CERCLA RQ'S: RQ #1-TOLUENE, 1000 LB EQUAL TO 5556 LBS (890 GALLONS THIS MATERIAL); RQ #2-CYCLOHEXANE, 1000 LB EQUAL TO 33333 LB (5342 GALLONS THIS MATERIAL).

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

HCC:F2

Boiling Pt:B.P. Text:201F,94C

Vapor Pressure:25

es:25

Vapor Density:3.4

Spec Gravity:0.746

Viscosity:0.68 CST

Evaporation Rate & Reference:3.9 (N-BUTYL ACETATE=1)

Solubility in Water:NEGLIGIBLE

Appearance and Odor:WATER WHITE LIQUID; LIGHT HYDROCARBON ODOR

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS AND REDUCING AGENTS.

Stability Condition to Avoid:ALL POSSIBLE SOURCES OF IGNITION. AVOID

EXPOSURE TO INCOMPATIBLE

MATERIALS.

Hazardous Decomposition Products:CARBON MONOXIDE & CARBON DIOXIDE.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Waste Disposal Methods:RCRA WASTE NUMBERS D001 AND D018 MAY APPLY IF UNUSED/UNCONTAMINATED. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. SARA 313-TOLUENE, CAS# 108-88-3, 10-18%; CYCLOHEXANE, CAS# 110- 82-7, 1-3%.

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