

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

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

Product ID:11135, LACTOL SPIRITS

MSDS Date:10/19/1991

FSC:6810

NIIN:00-238-8119

MSDS Number: BDMCN

=== Responsible Party ===

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

Address:1345 N MEACHAM

City:SCHAUMBURG

State:IL

ZIP:60196

Country:US

Info Phone Num:312-4

90-2500/312-619-2644

Emergency Phone Num:312-490-2500/800-424-9300(CHEMTREC)

CAGE:94684

=== Contractor Identification ===

Company Name:CHEMICAL SPECIALISTS AND DEVELOPMENT INC

Address:2210 HACKBERRY LN

Box:687

City:CONROE

State:TX

ZIP:77305

Country:US

Phone:409-756-1065

CAGE:4N760

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

Company Name:PHIPPS PRODUCTS CORP

Address:186 LINCOLN ST SUITE 502

Box:City:BOSTON

State:MA  
ZIP:02111-2403  
Country:US  
Phone:OUT OF BUSINESS  
CAGE:86511  
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

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===== 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 BY M.  
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 BY M.  
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 BY M.  
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 BY M.  
OSHA PEL:200 PPM/150 STEL  
ACGIH TLV:50 PPM; 9293  
EPA Rpt Qty:100

0 LBS  
DOT Rpt Qty:1000 LBS

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

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE-EYES/SKIN:IRRITATION.  
INHALATION:IRRITATION TO THE RESPIRATORY TRACT, DIZZINESS,  
HEADACHE, UNCONSCIOUSNESS. IN  
GESTION:INTESTINAL DISORDERS, NAUSEA,  
VOMITING; ASPIRATION INTO LUNGS MAY CAUSE CHEMICAL PNEUMONITIS  
WHICH CAN BE FATAL. CHRONIC-DERMATITIS, LIVER AND KIDNEY DAMAGE.  
Effects of Overexposure:EYE-IRRIT,BURNING,TEARING,REDNESS. SKIN-  
IRRIT;PROLONG/REPEAT CONTACT-REDNESS,BURNING,DRYING,CRACKING.  
INHAL-TOXIC; IRRIT NOSE/THROAT;NERVOUS SYS  
DEPRESS;DROWSINESS,DIZZ,LOSS OF COORDIN, FATIGUE. INGEST-IRRIT OF  
DIGEST TRACT;NAUSEA, VOMITING.  
Medical Cond Aggravated by Exposure:PRE-EX  
ISTING SKIN CONDITIONS OR  
HEART DISORDERS.

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

First Aid:INHALATION:REMOVE TO FRESH AIR, PROVIDE CPR/OXYGEN IF NEEDED.  
EYE CONTACT:FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL HELP. SKIN  
CONTACT:WASH WITH SOAP AND WATER. GET MED ATTENTION IF SYMPTOMS  
PERSIST. INGESTION:DO NOT INDUCE VOMITING, GET MEDICAL HELP  
IMMEDIATELY.

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

Flash Point Method:TCC  
Flash Point:20.0F,-6.7C  
Lower Limits:1.0  
Upper Limits:7.0  
Extinguishing Media:DRY CHEMICALS, CARBON DIOXIDE, FOAM. WATER MAY BE  
AN INEFFECTIVE EXTINGUISHING AGENT.  
Fire Fighting Procedures:FIRE FIGHTERS SHOULD WEAR PROTECTIVE CLOTHING  
AND SELF-CONTAINED BREATHING APPARATUS.  
Unusual Fire/Explosion Hazard:FLASHBACK ALONG VAPOR TRAIL MAY OCCUR.  
THIS MATERIAL EXTREMELY FLAMMABLE-MAY BE IGNITED BY HEAT,SPARKS,FLAME OR  
STATIC ELECTRICITY. CONTAINER MAY EXPLODE IN HEAT OF FIRE

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

Spill Release Procedures:STAY UPWIND FROM SPILL. REMOVE ALL IGNITION SOURCES. VENTILATE AREA. FOAM MAY BE USED TO SUPPRESS VAPORS. KEEP OUT OF DRAINS,SEWERS,WATERWAYS. RECOVER BY VACUUM OR ABSORB IN SAND/INERT MATLS AND TRANS FER TO DRUMS FOR DISPOSAL, COVER DRUMS.  
Neutralizing Agent:NONE

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

Handling and Storage Precautions:KEEP CONTNRS CLOSED,COOL,DRY & AWAY F M SOURCES OF IGNIT.

Other Precautions:EMPTY CONTAINERS MAY BE FIRE HAZARD. FOLLOW ANSI Z49.1 FOR CLEANING,REPAIRING,WELDING OR OTHER CONTEMPLATED OPNS.

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

Respiratory Protection:IF AIRBORNE CONCENTRATION EXCEEDS TLV USE SUPPLIED AIR RESPIRATOR. DO NOT USE CHEMICAL CARTRIDGE RESPIRATOR.

Ventilation:ADEQUATE TO MAINTAIN VAPOR CONC BELOW TLV. USE EXPLOSION-PROOF SYSTEMS IF REQ'D.

Protective Gloves:IMPERVIOUS

Eye Protection:GOGGLES

Other Protective Equipment:IMPERVIOUS CLOTHING AS NEEDED. EYEWASH.

Work Hygienic Practices:DO NOT EAT, DRINK OR SMOKE WHILE WORKING WITH THIS PRODUCT.

Supplemental Safety and Health

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

HCC:F3

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

Vapor Pres:60

Vapor Density:3.4

Spec Gravity:0.746

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

Solubility in Water: