

UNION CARBIDE CORP., LINDE DIV. -- SYNASOL SOLVENT, PM-3224, 190 PROOF --  
6850-00-188-9875

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

Product ID:SYNASOL SOLVENT, PM-3224, 190 PROOF

MSDS Date:05/14/1990

FSC:6850

NIIN:00-188-9875

MSDS Number: BGSPM

=== Responsible Party ===

Company Name:UNION CARBIDE CORP., LINDE DIV.

Address:39 OLD RIDGEBURY RD

City:DANBURY

State:CT

ZIP:06817-0001

Country:US

Info Phone Nu

m:304-744-3487

Emergency Phone Num:304-744-3487

CAGE:36346

=== Contractor Identification ===

Company Name:MCKESSON CORP MCKESSON CHEMICAL CO DIV

Address:1734 HAYES AVE

Box:City:LONG BEACH

State:CA

ZIP:90813

Country:US

Phone:415-983-9214

CAGE:1JK82

Company Name:UNION CARBIDE CORP LINDE DIV

Address:39 OLD RIDGEBURY RD

Box:City:DANBURY

State:CT

ZIP:06817-0001

Country:US

Phone:800-822-4357; 304-744-3487

CAGE:36346

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

Ingred Name:E

THYL ALCOHOL (ETHANOL)

CAS:64-17-5

RTECS #:RQ6300000

Fraction by Wt: 53-55%

OSHA PEL:1000 PPM

ACGIH TLV:1000 PPM; 8990

Ingred Name:METHYL ALCOHOL (METHANOL) (SARA III)

CAS:67-56-1

RTECS #:PC1400000

Fraction by Wt: 3%

OSHA PEL:S,200PPM/250STEL

ACGIH TLV:S,200PPM/250STEL; 93

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:ETHYL ACETATE (SARA III)

CAS:141-78-6

RTECS #:AH5425000

Fraction by Wt: 0.6%

OSHA PEL:400 PPM

ACGIH TLV:400 PPM; 9192

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred

Name:ALPHATIC HYDROCARBONS

Fraction by Wt: 0.6%

Other REC Limits:500 PPM

Ingred Name:METHYL ISOBUTYL KETONE (SARA III)

CAS:108-10-1

RTECS #:SA9275000

Fraction by Wt: 0.6%

OSHA PEL:100 PPM/75 STEL

ACGIH TLV:50 PPM/75 STEL; 9293

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:WATER

CAS:7732-18-5

RTECS #:ZC0110000

Fraction by Wt: 42-44%

Ingred Name:\*\*NOTE\*\* MFR SUPPLIED MSDS FOR CONC. ETHANOL. % WERE TAKEN  
FROM MIL SPEC. AND REPRESENT THE DILUTED PRODUCT.

RTECS #:9999999ZZ

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===== Hazards Identification =====  
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LD50 LC50 Mixture:LD50 (ORAL RAT) IS 7060 MG/KG (ETHANOL)

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

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

Health Hazards Acute and Chronic:THE DENATURANTS ARE TOXIC CAUSING CENTRAL NERVOUS SYSTEM DEPRESSION. TOXICITY VARIES FROM ONE INDIVIDUAL TO THE NEXT WITH AS LITTLE AS 4 ML OF THE DENATURANT INGESTED BEING TOXIC. METHANOL IS VERY TOXIC TO THE OPTIC NERVE,

CAUSING SIGHT DISTURBANCES AND BLINDNESS WELL BELOW THE TOXIC AMOUNT.

Explanation of Carcinogenicity:NONE OF THE COMPOUNDS IN THIS PRODUCT IS LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.

Effects of Overexposure:EYE:IRRITATION. SKIN:IRRITATION, DEFATTING. INHALED:HEADACHE,DROWSINESS,LASSITUDE,LOSS OF APPETITE,INABILITY TO CONCENTRATE. INGESTED:G/I IRRITATION,NAUSEA,VOMITING,DIARRHEA,CENTRAL NERVOUS SYSTEM DEPRESSION.

Medical Cond Aggravated by Exposure:PERSONS WITH A HISTORY OF AILMENTS

OR WITH A PRE-EXISTING DISEASE INVOLVING THE SKIN, EYE, RESPIRATORY TRACT, LIVER OR KIDNEY MAY BE AT INCREASED RISK FROM EXPOSURE.

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===== First Aid Measures =====  
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First Aid:EYE:FLUSH W/WATER 15 MIN, HOLD LIDS OPEN. SKIN:REMOVE CONTAMINATED CLOTHING AND LAUNDRER BEFORE REUSE. WASH WITH SOAP & WATER. INHALED:REMOVE TO FRESH AIR. RESTORE BREATHING AS NEEDED. INGESTED:GIVE 2 LARGE GLASSES OF MILK OR WATER AND IMMEDIATELY INDUCE VOMITING. GIVE NOTHING BY MOUTH IF UNCONSCIOUS. GET IMMEDIATE MEDICAL CARE.

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===== Fire Fighting Measures =====  
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Flash Point Method:TCC

Flash Point:57.0F,13.9C

Lower Limits:3.3

Upper Limits:19

Extinguishing Media:USE WATER FOG, FOAM FOR LARGE FIRES, CARBON DIOXIDE OR DRY CHEMICAL FOR SMALL ONES.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER

SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG GROUND OR FLOOR, THEN 'FLASH BACK' FROM A DISTANT IGNITION SOURCE.

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

Spill Release Procedures:ELIMINATE SOURCES OF IGNITION, VENTILATE AREA. WEAR APPROPRIATE RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING. CONTAIN SPILLED MATERIAL. TRANSFER TO SECURE CONTAINERS. WHERE NECESSARY, COLLECT USING ABSORBENT MEDIA. WASH RESIDUE WITH WATER.  
Neutralizing Agent:NOT APPLICABLE.

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

Handling and Storage Precautions:STORE IN A FLAMMABLE LIQUID STORAGE ROOM OR CABINET. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. PROTECT CONTAINERS FROM PHYSICAL DAMAGE.  
Other Precautions:'EMPTY' CONTAINERS MAY CONTAIN RESIDUE OR VAPORS. TREAT THEM WITH ALL THE PRECAUTIONS DUE FULL ONES.

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

Respiratory Protection:RESPIRATOR WILL NOT NORMALLY BE NECESSARY. USE NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR OR RESPIRATOR FOR ORGANIC VAPOR IF EXPOSURE IS ABOVE THE TLV/PEL. SEE 29 CFR 1910.134 FOR REGULATIONS PERTAINING TO RESPIRATOR USE.  
Ventilation:MECHANICAL (GENERAL) ROOM VENTILATION IS NORMALLY ADEQUATE. LOCAL EXHAUST MAY BE REQUIRED IF WORK AREA NOT VENTED.  
Protective Gloves:NEOPRENE, NITRILE, PVC OR NATURAL RUBBER  
Eye Protection:SAFETY GLASSES OR SPLASH GOGGLES  
Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER. INDUSTRIAL-TYPE WORK CLOTHING AND APRON AS REQUIRED TO PREVENT PROLONGED CONTACT.  
Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR FOOTWEAR.  
Supplemental Safety and Health  
CAUTION: FOR MANUFACTURING, PROCESSING, REPACKING OR INDUSTRIAL USE. NOT FOR HOUSEHOLD USE.

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

Properties =====

HCC:F2

Boiling Pt:B.P. Text:171F,77C

Melt/Freeze Pt:M.P/F.P Text:-130F,-90C

Vapor Pres:48.4 MM

Vapor Density:1.8

Spec Gravity:0.79

Evaporation Rate & Reference:3.6 (BUTYL ACETATE = 1)

Solubility in Water:COMPLETE

Appearance and Odor:CLEAR, COLORLESS LIQUID,ALCOHOL ODOR

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS, CONCENTRATED SULFURIC A  
ND NITRIC ACIDS

Stability Condition to Avoid:HIGH TEMPERATURES, SPARKS, AND OPEN FLAMES

Hazardous Decomposition Products:CARBON MONOXIDE CAN FORM ON INCOMPLETE  
COMBUSTION.

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

Waste Disposal Methods:DISPOSE I/A/W ALL FEDERAL, STATE AND LOCAL  
REGULATIONS. MANUFACTURER SUGGESTS THAT DISPOSAL MAY BE DONE BY  
INCINERATION.

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