

UNION CARBIDE CORP., INDUSTRIAL CHEMICALS DIVISION -- ETHANOL SDA 3A 200 PROOF --
6810-00-201-0904

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

Product ID:ETHANOL SDA 3A 200 PROOF

MSDS Date:09/28/1990

FSC:6810

NIIN:00-201-0904

MSDS Number: BRDHV

=== Responsible Party ===

Company Name:UNION CARBIDE CORP., INDUSTRIAL CHEMICALS DIVISION

Address:39 OLD RIDGEBURY ROAD

City:DANBURY

State:CT

ZIP:06817-0001

Countr

y:US

Info Phone Num:304-744-3487

Emergency Phone Num:800-822-4357

CAGE:61637

=== Contractor Identification ===

Company Name:UNION CARBIDE CORP

Address:39 OLD RIDGEBURY ROAD

Box:City:DANBURY

State:CT

ZIP:06817-0001

Country:US

Phone:800-822-4357/732-563-5522 (MSDS)

CAGE:61637

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

Ingred Name:ETHYL ALCOHOL (ETHANOL)

CAS:64-17-5

RTECS #:KQ6300000

Fraction by Wt: 96.2%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1000 PPM

ACGIH TLV:1000

PPM; 9293

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

CAS:67-56-1

RTECS #:PC1400000

Fraction by Wt: 4.7%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:S,200PPM/250STEL

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

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:ISOPROPYL ALCOHOL (SARA III)

CAS:67-63-0

RTECS #:NT8050000

Fraction by Wt: 25% PPM

Other REC Limits:NONE RECOMMENDED

OSHA PEL:400 PPM/500 STEL

ACGIH TLV:400 PPM/500STEL;9293

Ingred Name:ACETALDEHYDE (SARA III)

CAS:75-07-0

RTECS #:AB192500

0

Fraction by Wt: 10% PPM

Other REC Limits:NONE RECOMMENDED

OSHA PEL:200 PPM/150 STEL

ACGIH TLV:C25,A3 93-94

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

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

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:ACUTE: INHALATION:MAY CAUSE HEADACHE,
DROWINESS & LASSITUDE, LOSS OF APPE

TITE & INABILITY TO CONCENTRATE.

IRRITATION OF THE THROAT. INGESTION: CAN CAUSE DEPRESSION OF CNS,
NAUSEA, VOMITING & DIARRHEA. EYE:LIQUID OR VAPOR MAY CAUSE
IRRITATION. SKIN: MAY CAUSE IRRITATION AND DEFATTING OF SKIN ON
PROLONGED CONTACT.

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

Effects of Overexposure:MAY CAUSE EYE, SKIN & RESPIRATORY TRACT
IRRITATION. INDIVIDUAL RESPONSES TO METHYL ALCOHOL V

ARY. INGESTION

OF LESS THAN 30 ML HAS BEEN FATAL TO HUMANS. IN GENERAL, A FEW OUNCES MAY CAUSE BLINDNESS AND DEATH; AS LITTLE AS 4 ML MAY BE TOXIC IF INGESTED. MAY CAUSE HEADACHE, DROWINESS, CNS DEPRESSION, NAUSEA, & DIARRHEA.

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: INHALATION: REMOVE TO FRESH AIR. RESUSCITATE IF NOT BREATHING. GET MEDICAL ATTENTION. EYES: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MINUTES. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHIN G. FLUSH WITH WATER. IF IRRITATION PERSISTS, GET MEDICAL ADVICE. INGESTION: DO NOT INDUCE VOMITING UNLESS INSTRUCTED TO DO SO. GIVE NOTHING BY MOUTH IF UNCONSCIOUS. GET IMMEDIATE MEDICAL ATTENTION.

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Fire Fighting Meas
ures =====

Flash Point Method: TCC

Flash Point: =13.3C, 56.F

Lower Limits: 3.3(ETHANOL)

Upper Limits: 36(METHANOL)

Extinguishing Media: USE WATER FOG, CARBON DIOXIDE, FOAM, 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.

Unusual Fire/Explosion Hazard: COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS. VA PORS HEAVIER THAN AIR. CAN TRAVEL ALONG GROUND AND FLASHBACK.

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Accidental Release Measures =====

Spill Release Procedures: WEAR APPROPRIATE RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING. CONTAIN SPILLED MATERIAL. TRANSFER TO SECURE CONTAINERS. WHERE NECESSARY, COLLECT USING ABSORBENT MEDIA. ELIMINATE ANY SOURCE OF IGNITI ON. VENTILATE AREA. WASH RESIDUE WITH WATER.

Neutralizing Agent: NOT APPLICABLE.

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Handling and Stora

ge =====

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:MAKE FREQUENT CAREFUL LEAKAGE INSPECTIONS. ISOLATE FROM OXIDIZERS, CHEMICALS CAPABLE OF SPONTANEOUS HEATING, MATERIALS REACTING WITH AIR OR MOISTURE TO LIBERATE HEAT, IGNITION SOURCES AND EXPLOSIVES. KEEP OUT OF DIRECT SUN & AWAY FROM HEAT.

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Exposure Controls/Personal Protection =====

Respiratory Protection:IF VENTILATION DOES NOT MAINTAIN INHALATION EXPOSURES BELOW PEL(TLV), USE NIOSH/MSHA APPROVED RESPIRATORS. RESPIRATORS SHOULD BE SELECTED BASED ON THE FORM AND CONCENTRATION OF CONTAMINANT IN AIR & IN ACCORDANCE WITH OSHA (29 CFR 1910.134).

Ventilation:MECHANICAL (GENERAL) ROOM VENTILATION IS NORMALLY ADEQUATE. LOCAL EXHAUST MAY BE REQUIRED IF WORK AREA NOT VENTED.

Protective Gloves:NEOPRENE, NITRILE, VPC OR NATURAL RUBBER

Eye Protection:SAFETY GOGGLES WITH OPTIONAL FACE SHIELD

Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWER. INDUSTRIAL-TYPE WORK CLOTHING AND APRON AS REQUIRED.

Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR FOOTWEAR.

Supplemental Safety and Health

AVOID PROLONGED OR REPEATED EXPOSURE. DO NOT GET ON SKIN OR IN EYES. DO NOT BREATHE VAPORS OR MISTS. CAUTION: FOR MANUFACTURING,

PROCESSING, REPACKING OR INDUSTRIAL USE. NOT FOR HOUSEHOLD USE. CONTAINER HAZARDOUS WHEN EMPTY. EMPTIED CONTAINERS RETAIN RESIDUAL LIQUID AND VAPOR. FOLLOW PRECAUTIONS ON LABEL AND IN MSDS.

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

HCC:F5

NRC/State Lic Num:NOT RELEVANT

Boiling Pt:=77.2C, 171.F

Melt/Freeze Pt: