

WARDS NATURAL SCIENCE ESTABLISHMENT INC -- ETHYL ALCOHOL,DENATURED --  
6810-00-205-6786

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

Product ID:ETHYL ALCOHOL,DENATURED

MSDS Date:07/01/1986

FSC:6810

NIIN:00-205-6786

MSDS Number: BXJTH

=== Responsible Party ===

Company Name:WARDS NATURAL SCIENCE ESTABLISHMENT INC

Address:5100 W HENRIETTA RD

Box:92912

City:ROCHESTER

State:NY

ZIP:14692

Country:US

Info Phone Num:7

16-359-2502/334-4222 (NIGHT)

Emergency Phone Num:716-359-2502/800-424-9300(CHEMTREC)

Resp. Party Other MSDS Num.:REFILL KIT FOR LAB 9 #36-7127 #36-7107

Preparer's Name:ALEXANDER A. PICCIRILLI

Chemtrec Ind/Phone:(800)424-9300

CAGE:63759

=== Contractor Identification ===

Company Name:WARDS NATURAL SCIENCE ESTABLISHMENT INC

Address:5100 W HENRIETTA RD

Box:92912

City:ROCHESTER

State:NY

ZIP:14692-9012

Country:US

Phone:(716) 359-2502

Contract Num:MDA414-01P-0092

CAGE:63759

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

Ingred Name:ETHYL ALCOHOL (FLAMMABLE)

CAS:64-17-5

RTECS #:KQ6300000

= Wt:89.

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1000 PPM

ACGIH TLV:1000 PPM (AIR)

Ingred Name:METHANOL (FLAMMABLE: TOXIC)

CAS:67-56-1

RTECS #:PC1400000

= Wt:4.5

Other REC Limits:NONE RECOMMENDED

ACGIH TLV:200 PPM (SKIN)

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:ETHYL ACETATE (FLAMMABLE: TOXIC BY INHALATION)

RECOMMENDED  
ACGIH TLV:400 PPM  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingrid Name:ALIPHATIC HYDROCARBONS (FLAMMABLE: IRRITANT)  
= Wt:1.  
Other REC Limits:NONE RECOMMENDED  
ACGIH TLV:500 PPM

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

Health Hazards Acute and Chronic:DANGER. POISON IF SWALLOWED.  
Effects of Overexposure:INGESTION-CAUSES DIZZINESS, DROWSINESS,  
DECREASED REACTION, EUPHORIA, NAUSEA, VOMITING, STAGGERING GAIT,  
AND COMA. SKIN ABSORPTION-NO EVIDENCE OF  
ADVERSE EFFECTS FROM  
AVAILABLE INFORMATION. INHALATION -MAY CAUSE DIZZINESS, DROWSINESS,  
NAUSEA AND VOMITING. SKIN CONTACT-DEHYDRATION OF SKIN. EYE  
CONTACT-CAUSES MINOR IRRITATION.

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

First Aid:INGESTION-DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR  
VERY DROWSY PERSON. IF CONSCIOUS, GIVE TWO GLASSES OF WATER TO  
DRINK, INDUCE VOMITING. REPEAT TILL FLUID IS CLEAR. CALL PHYSICIAN  
IMMEDIATE LY. SKIN-FLU  
SH WITH WATER. INHALATION-REMOVE TO FRESH  
AIR. EYES-IMMEDIATELY FLUSH EYES WITHY PLENTY OF WATER FOR AT LEAST  
15 MINUTES. GET MEDICAL ATTENTION. NOTES TO PHYSICIAN: INGESTION OF  
LARGE QUAN TITIES OF THIS MATERIAL WILL RESULT IN METHYL ALCOHOL  
POISONING.

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

Flash Point Method:TCC  
Flash Point:=8.3C, 47.F  
Lower Limits:3.3 ET.ALCOH  
Upper Limits:19 ET.ALCOHO  
Extinguishing Media:WATER SPRAY, CARBON DIOXIDE (CO2); DRY C

HEMICAL

(ABC); ALCOHOL-TYPE, OR UNIVERSAL-TYPE FOAM.

Fire Fighting Procedures:WEAR A NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING.

Unusual Fire/Explosion Hazard:VAPORS FORMED FROM THIS PRODUCT MAY TRAVEL OR BE MOVED BY AIR CURRENTS & IGNITED BY PILOT LIGHTS, OTHER FLAMES, SMOKING, SPARKS, HEATERS, ELECTRICAL EQUIPMENT, STATIC DISCHARGE, OR OTHER IGNITION SOURCES AT LOCATION DISTANT FROM HANDLING POINT.

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

Spill Release Procedures:REMOVE ALL SOURCES OF IGNITION, PROVIDE ADEQUATE VENTILATION. FOR SMALL SPILLS, DILUTE WITH WATER AND FLUSH TO SEWER WITH COPIOUS AMOUNTS OF WATER OR ABSORB ON VERMICULITE, PAPER, EARTH OR OTHER ABSORBENT. BURN IN AN APPROVED INCINERATOR OR OPEN PIT AWAY FROM BUILDINGS AND PEOPLE.

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

Handling and Storage Precautions:STORE IN COOL, DRY, WELL, VENTILATED

AREA, AWAY FROM FIRE HAZARD. USE WITH ADEQUATE VENTILATION. DO NOT TAKE INTERNALLY. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE.

Other Precautions:READ LABEL ON CONTAINER BEFORE USING. WASH THOROUGHLY AFTER HANDLING. FOR LABORATORY USE ONLY. NOT FOR DRUG, FOOD OR HOUSEHOLD USE. KEEP OUT OF REACH OF CHILDREN.

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

Respiratory Protection:FOR NORMAL LABORATORY USE AT ROOM TEMPERATURES NONE SHOULD BE NEEDED. IF REQUIRED WORK IN FUME HOOD.

Ventilation:LOCAL EXHAUST: RECOMMENDED. MECHANICAL (GENERAL): RECOMMENDED. SPECIAL: NO. OTHER: NONE.

Protective Gloves:RUBBER.

Eye Protection:CHEMICAL SAFETY GLASSES.

Other Protective Equipment:SMOCK, APRON, EYE WASH STATION, GOGGLES, FIRE EXTINGUISHERS, PROPER GLOVES.

Work Hygienic Practices:OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES.

Supplemental Safety and Health

CAUTION: FLAME MAY NOT BE VISIBLE IN DAYLIGHT. FIRE OR EXCESSIVE HEAT

MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS: CAN REACT VIGOROUSLY WITH OXIDIZING MATERIALS.

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

HCC:F2  
NRC/State Lic Num:NOT RELEVANT  
Boiling Pt:=78.9C, 174.F  
Melt/Freeze Pt:=-80.C, -112.F  
Vapor Pres:42 @ 68F  
Vapor Density:1.6  
Spec Gravity:0.795  
Evaporation Rate & Reference:4.1 (N-BUTYL ACETATE=1)  
Solubility in Water:COMPLETE  
Appearance and Odor:CLEAR, COLORLESS, MOBILE LIQUID - MILD CHARACTERISTIC ODOR.  
Percent  
Volatiles by Volume:100 WT

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

Stability Indicator/Materials to Avoid:YES  
CONCENTRATED NITRIC ACID; STRONG OXIDIZING AGENTS.  
Stability Condition to Avoid:HEAT, FIRE, IGNITION SOURCES.  
Hazardous Decomposition Products:THERMAL DECOMPOSITION OR BURNING CAN PRODUCE CARBON MONOXIDE AND/OR CARBON DIOXIDE.

===== Toxicological Information =====

Toxicological Information:THRESHOLD LIMIT VALUE: ETHYL ALCOH  
OL TWA:  
1000PPM; 1900MG/M3 (AIR). METHANOL TWA: SKIN 200PPM; 260MG/M3;  
ETHYL ACETATE TWA; 1400 MG/M3 (AIR).

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

Waste Disposal Methods:DISPOSE OF IN AN APPROVED INCINERATOR OR CONTRACT WITH A LICENSED WASTE DISPOSAL SERVICE. DISCHARGE, TREATMENT, OR DISPOSAL MAY BE SUBJECT TO LOCAL, STATE OR FEDERAL LAWS.

===== MSDS Transport Information =====

Transport Information:D.O.T.: FLAMMA

BLE LIQUID.

===== Other Information =====

Disclaimer (provided with this information by the compiling agencies):  
This information 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.