Product ID: ISOPROPYL ALCOHOL MSDS Date:09/03/1986 FSC:6810 NIIN:00-543-7915 MSDS Number: CDZFV === Responsible Party === Company Name: GLOBAL AMCHEM, INC. Box:2221 City:LONGVIEW State:TX ZIP:75606 Country:US Info Phone Num:903-236-0138/FAX 0139 Emergency Phone Num:903-236-0138 CAGE:056F3 === Contractor Identification === Company Name: GLOBAL AMCHEM, INC. Box:2221 City:LONGVIEW State:TX ZIP:75606 Country:US Phone:903-236-0138/FAX 0139 CAGE:056F3

Ingred Name:ISOPROPYL ALCOHOL (SARA 313) CAS:67-63-0 RTECS #:NT8050000 Fraction by Wt: 90- 100% Other REC Limits:NONE RECOMMENDED OSHA PEL:400 PPM ACGIH TLV:400 PPM/500STEL;9596

LD50 LC50 Mixture:ORAL (LD50, RAT) 5

,045 MG/KG Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:TARGET ORGANS:EYES, SKIN, RESPIRATORY SYSTEM. ACUTE- HARMFUL IF INHALED/INGESTED. MAY CAUSE CNS DEPRESSION. MAY CAUSE EYE IRRITATION & DAMAGE. PROLONGED/REPEATED SKIN CONTACT MAY CAUSE DEFATTING, IRRI TATION & BURNING SENSATION. INGESTION MAY CAUSE GASTROINTESTINAL TRACT IRRITATION. CHRONIC- MAY CAUSE DERMATITIS.

Explanation

of Carcinogenicity:NONE

Effects of Overexposure: IRRITATION, HEADACHE, DIZZINESS, DROWSINESS, NAUSEA, VOMITING, TEARING, DEFATTING OF SKIN, CRACKING, BURNING SENSATION, PAIN, DERMATITIS, UNCONSCIOUSNESS

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN DISORDERS, EYE PROBLEMS OR IMPAIRED RESPIRATORY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS PRODUCT.

First Aid:GET MEDICAL HELP IF S

YMPTOMS PERSIST. INHALED:REMOVE TO FRESH

AIR. PROVIDE CPR/OXYGEN IF NEEDED. EYES: IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. HOLD EYELIDS OPEN. SKIN: WASH WITH PLENTY OF SOAP & WA TER. ORAL: DO NOT INDUCE VOMITING. IF CONSCIOUS, DRINK WATER. SEEK IMMEDIATE MEDICAL ATTENTION. IF VOMITING OCCURS, KEEP HEAD BELOW HIPS. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

Flash Point Method:CC
Flash Poin
t:53.0F,11.7C
Lower Limits:2.0
Upper Limits:12.0
Extinguishing Media:USE WATER FOG/SPRAY, CARBON DIOXIDE, "ALCOHOL"
FOAM, OR DRY CHEMICAL. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.
Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND
NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN POSITIVE PRESSURE MODE.

Unusual Fire/Explosion Hazard: VAPOR IS HEAVIER THAN AIR AND CAN TRAVEL CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BA

CK. CONTAINERS MAY RUPTURE DUE TO VAPOR PRESSURE BUILDUP.

Spill Release Procedures:WEAR PROTECTIVE EQUIPMENT. ELIMINATE SOURCES OF IGNITION. VENTILATE AREA. REMOVE SPILL WITH NON-FLAMMABLE ABSORBENT SUCH AS SAND. PLACE IN CONTAINER FOR DISPOSAL. PREVENT LIQUID FROM ENTERING SEWERS, WATERWAYS OR LOW AREAS. Neutralizing Agent:DILUTE WITH WATER

Handling and Storage Precautions:STORE IN TIGHTLY CLOSED CONTAINERS IN A COOL & VENTILATED AREA AWAY FROM INCOMPATIBLES. AVOID EXCESSIVE HEAT. KEEP AWAY FROM SOURCES OF IGNITION.

Other Precautions: AVOID BREATHING VAPORS. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING OR DRINKING. KEEP OUT OF REACH OF CHILDREN. DO NOT INGEST.

Respiratory Protection:IF TLV IS EXCEEDE D OR FOR SYMPTOMS OF OVER EXPOSURE, WEAR NIOSH-APPROVED ORGANIC VAPOR RESPIRATOR OR SUPPLIED AIR RESPIRATOR. IN EMERGENCY, WEAR A NIOSH-APPROVED POSITIVE-PRESSURE SELF-CONTAINED BREAT HING APPARATUS. Ventilation:MECHANICAL (GENERAL AND/OR LOCAL EXHAUST, EXPLOSION-PROOF) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S). Protective Gloves:RUBBER, NEOPRENE FOR REPEATED CONTACT Eye Protection:SAFETY GLASSES/CHEMICAL SPLASH GOGGLESS Other Protective Equipment:EYE WASH STATION & SAFETY SH OWERS SHOULD BE AVAILABLE IN THE IMMEDIATE VICINITY OF ANY POTENTIAL EXPOSURE. Work Hygienic Practices:OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES.

Supplemental Safety and Health

HCC:F2 NRC/State Lic Num:NOT RELEVANT Boiling Pt:B.P. Text:180F,82C Melt/Freeze Pt:M.P/F.P Text:-128F,-89C Vapor Pres:33 @ 68F Vapor Density:2.1 Spec Gravity:0.79 Evaporation Rate & amp; Reference:2.83 (N-BUTYL ACETATE =1) Solubility in Water:INFINITE Appearance and Odor:COLORLESS LIQUID - RUBBING ALCOHOL ODOR Percent Volatiles by Volume:100

Stability Indicator/Materials to Avoid:YES
STRONG OXIDIZING AGENTS, ALUMINUM, SULFURIC ACID, NITRIC ACID, AMINES, AMMONIA, HALOGEN, HALOGEN ACIDS, HALOGENATED CMPD
Stability Condition to Avoid:HIGH HEAT, SUNLIGHT, SPARKS, OPEN FLAMES AND OTHER SOURCES OF IGNITION
Hazardous Decomposition Products:
MAY EMIT CARBON MONOXIDE, CARBON DIOXIDE.

Waste Disposal Methods:DISPOSE IN AN APPROVED INCINERATOR/CONTRACT WITH LICENSED CHEMICAL WASTE DISPOSAL SERVICE. DISCHARGE, TREATMENT/DISPOSAL IS SUBJECT TO FEDERAL, STATE OR LOCAL LAWS (WASTE CODE D001). WHEN EMPTY, THROU GHLY RINSE CONTAINER WITH WATER BEFORE DISPOSAL.

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

ormulated 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.