Product ID: ISOPROPYL ALCOHOL MSDS Date:11/04/1991 FSC:6810 NIIN:00-855-1158 MSDS Number: BFSWP === Responsible Party === Company Name: SHELL OIL CO, SHELL CHEMICAL CO DIV Address:1 SHELL PLAZA Box:2463 **City:HOUSTON** State:TX ZIP:77001 Country:US Info Phone Num:713-241-4819 **Emergency Phone** Num:713-473-9461,800-424-9300(CHEMTREC) CAGE:MO111 === Contractor Identification === Company Name: AMCO CHEMICAL CORP Address:3RD - CYPRS Box:208 City:OAKLAND State:CA ZIP:94607 Country:US Phone:NOT IN BUSINESS! 911008P505A ??? CAGE:97984 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 Countr

y:US Phone:316-838-4663 CAGE:0A9L8 Company Name: SHELL OIL CO, SHELL CHEMICAL CO DIV Address:1 SHELL PLAZA Box:2463 City:HOUSTON State:TX ZIP:77001 Country:US Phone:713-241-4819 CAGE:MO111 Company Name: SOLVENTS AND CHEMICALS, INC. Address:4704 SHANK ROAD Box:City:PEARLAND State:TX ZIP:77588-0490 Country:US Phone:281-485-5377 CAGE:4W432

Ingred Name:ISOPROPYL ALCOHOL (SARA III) CAS:67-63-0 RTECS #:NT8050000 Fraction by Wt: 100% Other REC Limits:NONE RECOMMENDED OSHA PEL:400 PPM ACGIH TLV:400 PPM/500STEL;9394

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 5840 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:EYES: IRRITATION. SKIN: IRRITATION. INHALATION: IRRITATING TO NOSE, THROAT, RESPIRATORY TRACT. MAY RESULT IN CENTRAL NERVOUS SYSTEM DEPRESSION. INGE STION: GI TRACT IRRITATION, CAUSING ABDOMINAL PAIN A ND VOMITING, SOMETIMES BLOODY. ALSO MAYCAUSE CNS DEPRESSION, LOW BLOOD PRESSURE, RAPID HEART BEAT,AND LIVER DAMAGE. Explanation of Carcinogenicity:NONE Effects of Overexposure:EYES: IRRITATION. SKIN: IRRITATION. INHALATION: NOSE, THROAT AND RESPIRATORY TRACT IRRITATION, CNS DEPRESSION, GIDDINESS, HEADACHE, DIZZINESS, NAUSEA, UNCONCIOUSNESS, RESPIRATORY DEPRESSION, DEATH. IN GESTION: GI TRACT IRRITATION, ABDOMINALPAIN, VOMITING, CNS DEPRESSION, LOW BLOOD PRESSURE, LIVER DAMAGE, JAUNDICE.

Medical Cond Aggravated by Exposure:PREEXISTING EYE, SKIN, RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT. IMPAIRED FUNCTION FROM PREEXISTING DISORDERS MAY BE ALSO BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING . FLUSH AREA WITH

LARGE AMOUNTS OF WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION. INHALATION: MOV E TO FRESH AIR. IF NOT BREATHING, GIVE CPR. IF BREATHING DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION. INGESTION: GIVE TWO GLASSES OF WATER AND INDUCE VOMITING. GET MEDICAL ATTENTION.

Spill Release Proced

ures: ELIMINATE IGNITION SOURCES. DIKE AND CONTAIN SPILL. CONTAIN RUN-OFF. REMOVE LIQUID WITH VACUUM TRUCK OR PUMP TO SALVAGE VESSEL. SOAK UP RESIDUE WITH AN ABSORBENT. PLACE IN SEALED CONTAINER FOR DISPOSA L. FLUSH AREA WITH WATER TO REMOVE TRACERESIDUE.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling and Storage Precautions: USE WITH ADEQUATE VENTILATION. KEEP CONTAINERS CLOSED WHEN NOT IN USE.

GROUND FIXED EQUIPMENT. BOND AND GROUND TRANSFER CONTAINERS AND EQUIPMENT. Other Precautions: DO NOT STORE OR HANDLE IN ALUMINUM EQUIPMENT AT TEMPERATURES ABOVE 120F. EMPTY CONTAINERS MAY CONTAIN EXPLOSIVE VAPORS. DO NOT PRESSURIZE, CUT, DRILL, GRIND, WELD, BRAZE, SOLDER, OR EXPOSE SUCH CONTAI NERS TO HEAT, SPARKS AND FLAMES. Respiratory Protection: IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS, USE A NIOSH-APPROVED ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS. Ventilation: USE EXPLOSION-PROOF VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS BELOW RECOMMENDED EXPOSURE LIMITS. Protective Gloves: NEOPRENE, NITRILE, OR NATURAL RUBBER. Eye Protection: CHEMICAL GOGGLES TO AVOID EYE CONTACT. Other Protective Equipment: PROVIDE AN EYE WASH STATION AND SAFETY SHOWER. WEAR CHEMICAL RESISTANT CLOTHING AS REQUIRED TO MINIMIZE SKIN EXPOSURE. Work Hygienic Practices: WASH AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. Supplemental Safety and Health AIR-DRY CONTAMINATED CLOTHING IN A WELL VENTILATED AREA BEFORE LAUNDERING. VAPORS MAY ACCUMULATE AND TRAVEL TO IGNITION SOURCES DISTANT FROM HANDLING SITE; FLASH-FIRE CAN RESULT. HCC:F2 Boiling Pt:=82.2C, 180.F Melt/Freeze Pt:=-88.3C, -127.F Vapor Pres:32 V apor Density:2.1 Spec Gravity:0.79 Evaporation Rate & amp; Reference:1.4 (N-BUTYL ACETATE=1) Solubility in Water:COMPLETE Appearance and Odor: COLORLESS, MOBILE LIQUID. MILD ODOR. Percent Volatiles by Volume:100

Stability Indicator/Materials to Avoid:YES CONTACT WITH STRONG OXIDIZING AGENTS AND DO NOT STORE IN ALUMINUM EQUIPMENT AT TEMPERATURES ABOVE 120F. Stability Condition to Avoid:HEAT, SPARKS, FLAMES. Hazardous Decompos

ition Products:CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION. Conditions to Avoid Polymerization:WILL NOT OCCUR.

Waste Disposal Methods:DISPOSE OF WASTE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

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