

SHELL OIL CO -- ISOPROPYL ALCOHOL -- 6810-00-855-6160

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

Product ID:ISOPROPYL ALCOHOL

MSDS Date:06/15/1993

FSC:6810

NIIN:00-855-6160

MSDS Number: BRLZB

=== Responsible Party ===

Company Name:SHELL OIL CO

Address:CORORATE ENVIRONMENT AFFAIRS

Box:4320

City:HOUSTON

State:TX

ZIP:77210

Country:US

Info Phone Num:713-241-4819,713-241-2252

Emergency Phone Num:713-473-9461,  
800-424-9300(CHEMTREC)

CAGE:SHELO

=== Contractor Identification ===

Company Name:HOC INDUSTRIES, INC

Address:3511 N. OHIO

Box:2609

City:WICHITA

State:KS

ZIP:67219

Country:US

Phone:316-838-4663

CAGE:0A9L8

Company Name:SHELL OIL CO

Box:4320

City:HOUSTON

State:TX

ZIP:77210-5000

Country:US

Phone:713-473-9461/713-241-2252

CAGE:SHELO

Company Name:SHELL OIL COMPANY

Address:Box:2463

City:HOUSTON

State:TX

ZIP:77210

Country:US

Phone:800-231-6950

CAGE:54527

===== Composition/Information on Ingrid

ients =====

Ingred Name:ISOPROPYL ALCOHOL (IPA) (SARA III)  
CAS:67-63-0  
RTECS #:NT8050000  
Fraction by Wt: 100%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:400 PPM/500 STEL  
ACGIH TLV:400 PPM/500STEL;9293

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

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 5840 MG/KG  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:EYES: IRRITATING. SKIN: IRRITATING.

INHALATION: IRRITATING TO NOSE, THROAT, RESPIRATORY TRACT. MAY RESULT IN CENTRAL NERVOUS SYSTEM (CNS) DEPRESSION. INGESTION: IRRITATING TO GI TRACT. CAUSING ABDOMINAL PAIN AND VOMITING. SOMETIMES BLOODY.MAY CAUSE CNS DEPRESSION, LOW BLOOD PRESSURE, RAPID HEART BEAT AND LIVER DAMAGE.

Explanation of Carcinogenicity:ISOPROPANOL IS CLASSIFIED IARC-3(INSUFFICIENT EVIDENCE-HUMAN).

Effects of Overexposure:EYES: IRRITATION. SKIN: IRRITATION. INHALATION: IRRITATION OF NOSE, THROAT, RESPIRATORY TRACT, GIDDINESS, HEADACHE, DIZZINESS, NAUSEA, UNCONSCIOUSNESS, RESPIRATORY DEPRESSION, DEATH. INGESTION: IRRITATION OF GI TRACT, ABDOMINAL PAIN, VOMITING, CNS DEPRESSION, LOW BLOOD PRESSURE, LIVER DAMAGE, JAUNDICE, ABDOMINAL PAIN.

Medical Cond Aggravated by Exposure:PRE-EXISTING EYE, SKIN, AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT. IMPAIRED FUNCTION FROM PRE-EXISTING DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

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

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION. SKIN: FLUSH AREA WITH LARGE AMOUNTS OF WATER. IF IRRITATION OCCURS GET MEDICAL ATTENTION. INHALATION: MOVE TO FRESH AIR. GIVE OXYGEN OR CPR AS REQUIRED. GET MEDICAL ATENTION. INGESTION: GIVE 2 GLASSES WATER. INDUCE VOMITING BY GIVING 2 TABLESPOONS SYRUP OF IPECAC OR TOUCH FINGER TO BACK OF THROAT. GET MEDICAL ATTENT

ION.

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

Flash Point Method:TCC

Flash Point:53.0F,11.7C

Lower Limits:2

Upper Limits:12

Extinguishing Media:WATER FOG, "ALCOHOL" FOAM, DRY CHEMICAL, CARBON DIOXIDE.

Fire Fighting Procedures:COOL FIRE EXPOSED CONTAINERS WITH WATER. DO NOT ENTER CONFINED SPACE WITHOUT FULL BUNKER GEAR, INCLUDING A POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS.

Unusual Fire/Explosion Hazard:CONTAINERS EXPOSED TO INTENSE HEAT FROM

FIRES SHOULD BE COOLED WITH WATER TO PREVENT VAPOR PRESSURE BUILDUP WHICH COULD RESULT IN CONTAINER RUPTURE.

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

Spill Release Procedures:ELIMINATE IGNITION SOURCES. STOP LEAK. USE SPARK PROOF EQUIPMENT. DIKE AND CONTAIN SPILL. PUMP FREE LIQUID TO SALVAGE VESSEL. SOAK UP RESIDUE WITH INERT ABSORBENT. PLACE IN CLOSED CONTAINER FOR DISPOS AL. FLUSH AREA WITH WATER.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER

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

Handling and Storage Precautions:STORE IN COOL, WELL VENTILATED AREA AWAY FROM HEAT, SPARKS, AND FLAME. DO NOT STORE OR HANDLE IN ALUMINUM EQUIPMENT AT TEMPERATURES ABOVE 120F.

Other Precautions:VAPORS MAY ACCUMULATE AND TRAVEL TO IGNITION SOURCES DISTANT FROM HANDLING SITE, FLASH FIRE CAN RESULT. KEEP CONTAINERS CLOSED. GROUND FIXED EQUIPMENT. BOND AND GROUND TRANSFER CONTAINERS AND EQUIPMEN T.

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

Respiratory Protection:IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS, USE A NIOSH-APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. USE EITHER AN ATMOSPHERE-SUPPLING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR OR GANIC VAPORS.

Ventilation:USE EXPLOSION-PROOF VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS.

Protective Gloves:CHEMICAL RESISTANT GLOVES.

Eye Protection:CHEMICAL SPLASH GOGGLES.

Other Prote

Protective Equipment:FULL PROTECTIVE CLOTHING TO MINIMIZE SKIN CONTACT. PROVIDE EYE WASH STATION AND SAFETY SHOWER.  
Work Hygienic Practices:WASH AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE.  
Supplemental Safety and Health  
CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, CAN CONTAIN EXPLOSIVE VAPORS. DO NOT CUT, DRILL, GRIND, WELD OR PERFORM SIMILAR OPERATIONS ON OR NEAR CONTAINERS. DO NOT PRESSURIZE DRUM CONTAINERS TO EMPTY THE  
M. STATIC ELECTRICITY MAY ACCUMULATE AND CREATE A FIRE HAZARD. AIR-DRY CONTAMINATED CLOTHING BEFORE LAUNDRING.

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

HCC:F2  
Boiling Pt:B.P. Text:180F,82C  
Melt/Freeze Pt:M.P/F.P Text:-127F,-88C  
Vapor Pres:32  
Vapor Density:2.1  
Spec Gravity:0.79  
Evaporation Rate & 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 and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES  
STRONG OXIDIZING AGENTS. DO NOT STORE OR HANDLE IN ALUMINUM EQUIPMENT AT TEMPERATURES ABOVE 120F.  
Stability Condition to Avoid:HEAT, SPARKS, FLAME, OTHER SOURCES OF IGNITION. DO NOT STORE OR HANDLE IN ALUMINUM EQUIPMENT AT TEMPERATURES ABOVE 120F.  
Hazardous Decomposition Products:CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.  
Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

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

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