

SHELL CHEMICAL COMPANY A DIV. OF SHELL OIL CO. -- ISOPROPYL ALCOHOL --
6810-00-855-6160

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

Product ID:ISOPROPYL ALCOHOL

MSDS Date:11/04/1991

FSC:6810

NIIN:00-855-6160

MSDS Number: BFSTY

=== Responsible Party ===

Company Name:SHELL CHEMICAL COMPANY A DIV. OF SHELL OIL CO.

Address:1 SHELL PLAZA

Box:2463

City:HOUSTON

State:TX

ZIP:77001

Country:US

Info Phone Num:713-24

1-4819

Emergency Phone Num:713-473-9461

CAGE:86961

=== Contractor Identification ===

Company Name:PACKAGING SERVICES INC

Address:472 SHANK RD

Box:875

City:PEARLAND

State:TX

ZIP:77581

Country:US

Phone:713-485-1457

CAGE:9V846

Company Name:SHELL CHEMICAL COMPANY A DIV. OF SHELL OIL CO.

Address:1 SHELL PLAZA

Box:2463

City:HOUSTON

State:TX

ZIP:77001

Country:US

Phone:713-473-9461

CAGE:86961

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

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/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:EYE CONTACT-MODERATELY IRRITATING.
SKIN CONTACT-MILDLY IRRITATING. INHALATION-MAY CAUSE MILD

IRRITATION TO THE NOSE, THROAT & RESPIRATORY TRACT & MAY RESULT IN
CENTRAL NERVOUS SYSTEM DEPRESSION. INGESTION-IRRITATING TO THE
GASTROINTESTINALTRACT, CAUSING ABDOMINAL PAIN & VOMITING, SOMETIMES
BLOODY.

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

Effects of Overexposure:EARLY TO MODERATE CNS DEPRESSION MAY BE
EVIDENCED BY GIDDINESS, HEADACHE, DIZZINESS AND NAUSEA; IN EXTREME
CASES, UNCONSCIOUSNESS, RESPIRATORY DEP
RESSION AND DEATH MAY OCCUR.
LIVER DAMAGE MAY BE EVIDENCED BY LOSS OF APPETITE, JAUNDICE AND
SOMETIMES PAIN IN THE UPPER ABDOMEN ON THE RIGHT SIDE.

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

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

First Aid:EYE-FLUSH EYES WITH PLENTY
OF WATER FOR AT LEAST 15 MIN. GET
MEDICAL ATTENTION. SKIN-FLUSH SKIN WITH WATER. GET MEDICAL
ATTENTION. INHALATION-REMOVE VICTIM TO FRESH AIR & PROVIDE OXYGEN
IF BREATHING IS DIFFICULT. GET MEDICAL ATTENTION. INGESTION-DO NOT
GIVE LIQUIDS IF VICTIM IS UNCONSCIOUS OR DROWSY. GIVE NO MORE THAN
2 GLASSES OF WATER & INDUCE VOMITING BY GIVING 30 CC SYRUP OF
IPECAC. SEE DOC.

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

Flash Point Method:TCC
Flash Poi

nt:=11.7C, 53.F

Lower Limits:2

Upper Limits:12

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

Fire Fighting Procedures:WARNING. FLAMMABLE. CLEAR FIRE AREA OF PERSONNEL. DO NOT ENTER CONFINED SPACE WITHOUT FULL BUNKER GEAR, INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SCBA.

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:WARNING. FLAMMABLE. ELIMINATE ALL IGNITION SOURCES. HANDLING EQUIPMENT MUST BE GROUNDED TO PREVENT SPARKING. SMALL SPILLTAKE UP WITH ABSORBENT MATERIAL AND PLACE IN NON-LEAKING CONTAINERS; SEAL TIGHTLY FOR PROPER DISPOSAL.

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

Handling and Storage Precautions:DO NOT STORE OR HANDLE IN ALUMINUM EQUIPMENT AT TEMPERATURES ABOVE 120F. KEEP CONTAINERS CLOSED WHEN NOT IN USE. USE WITH ADEQUATE VENTILATION.

Other Precautions: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 THEM.

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

Respiratory Protection:IF EXPOSURE MAY/DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS, USE AN OSHA APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134 USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPOR.

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

Protective Gloves:WEAR CHEMICAL RESISTANT GLOVES.

Eye Protection:WEAR CHEMICAL GOGGLES.

Other Protective Equipment:WEAR CHEMICAL RESISTANT CLOTHING TO MINIMIZE SKIN CONTACT. EYE WASH FOUNTAIN & SAFETY SHOWER SHOULD

BE

AVAILABLE.

Work Hygienic Practices:WASH WITH SOAP & WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. LUANDER CONTAMINATED CLOTHING.

Supplemental Safety and Health

NOTE TO PHYSICIAN: IF VICTIM IS A CHILD. GIVE NO MORE THAN 1 GLASS OF WATER AND 15 CC SYRUP OF IPECAC, IF SYMPTOMS SUCH AS LOSS OF GAG REFLEX, CONVULSION OR UNCONSCIOUSNESS OCCURS BEFORE EMESIS, GASTRIC LAVAGE SHOULD BE CONSIDERED FOLLOWING INTUBATION WITH A CUFFED ENDOTRACHEAL TUBE.

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

HCC:F2

Boiling Pt:=82.2C, 180.F

Melt/Freeze Pt:=-88.3C, -127.F

Vapor Pres:32 MMHG

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.

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

Stability Indicator/Materials to Avoid:YES

AVOID CONTACT WITH STRONG OXIDIZING AGENTS. DO NOT STORE OR HANDLE IN

ALUMINUM EQUIPMENT AT TEMPERATURES ABOVE 120F.

Stability Condition to Avoid:AVOID HEAT, SPARKS, FLAME.

Hazardous Decomposition Products:CARBON MONOXIDE AND UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION.

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

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

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