

SHELL CHEMICALS CANADA LIMi -- ISOPROPYL ALCOHOL, ACS

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MSDS Safety Information
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FSC: 6810
NIIN: 00-227-0410
MSDS Date: 09/10/1997
MSDS Num: CJMDK
Product ID: ISOPROPYL ALCOHOL, ACS
MFN: 01
Responsible Party
Cage: 36131
Name: SHELL CHEMICALS CANADA LIMITED
Address: 400 4TH AVE SW SECTION C
Box: 42
80
City: CALGARY, ALBERTA CANADA NK 00000
Info Phone Number: 403-691-3111
Emergency Phone Number: 613.996.6666
Proprietary Ind: Y
Review Ind: Y
Published: Y

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Contractor Summary
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Cage: 0A9L8
Name: HOC INDUSTRIES, INC
Address: 3511 N. OHIO
Box: 2609
City: WICHITA KS 67219
Phone: 316-838-4663
Contract Number: SP0450-99-M-C350
Cage: 36131
Name: SHELL CHEMICALS CANADA LIMITED
Address: 400 4
TH AVE SW STATION C
Box: 4280
City: CALGARY, ALBERTA CANADA NK 00000
Phone: 403-691-2638/800-567-8860

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Item Description Information
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Item Manager: S9G
Item Name: ISOPROPYL ALCOHOL,ACS
Specification Number: O-C-265
Unit of Issue: GL
UI Container Qty: 4
Type of Container: BOTTLE

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Ingredients
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Name: *** PROPRIETARY ***

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Health Hazards Data

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LD50 LC50 Mixture: ORAL, RAT LD50: 4720 MG/KG

Route Of Entry Inds - Inhalation: YES

Skin: YES

Ingestion: YES

Effects of Exposure: EXPOSURE MAY OCCUR VIA INHALATION, SKIN ABSORPTION & SKIN OR EYE CONTACT. THIS PRODUCT IS IRRITATING TO THE EYE BUT IS NOT PRIMARY SKIN IRRITANT AFTER SHORT E

XPOSURE & IS NOT A SKIN SENSITIZER. PROLONGED AND REPEATED CONTACT WITH SKIN CAN CAUSE DEFATTING & DRYING RESULTING IN IRRITATION & DERMATITIS. EXPOSURE TO HIGH VAPOR CONCENTRATIONS MAY CAUSE EYE & RESPIRATORY TRACT IRRITATION. ALTHOUGH INGESTION IS UNLIKELY, LIQUID WOULD IRRITATE THE UPPER DIGESTIVE TRACT & CENTRAL NERVOUS SYSTEM DEPRESSION.

Explanation Of Carcinogenicity: NONE SPECIFIED BY MANUFACTURER.

Signs And Symptoms Of Overexposure: SKIN-DEFATTING, DRYING, IRRITATION,

DERMATITIS. EYES-IRRITATION. INHALED-IRRITATION, HEADACHE, DIZZINESS, NAUSEA, INCOORDINATION, DROWSINESS, LOSS OF UNCONSCIOUSNESS. INGESTED-IRRITATION OF UPPER DIGESTIVE TRACT, HEADACHE, DIZZINESS, FATIGUE.

Medical Cond Aggravated By Exposure: PREEXISTING EYE, SKIN & RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

First Aid: EYES-FLUSH WITH WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION AS SOON AS POSSIBLE AFTER

R 1ST AID HAS BEEN

INITIATED & COMPLETED. INHALATION-REMOVE VICTIM FROM FURTHER EXPOSURE & RESTORE BREATHING, IF REQUIRED. OBTAIN MEDICAL ATTENTION. INGESTED-DO NOT INDUCE VOMITING! NOTHING BY MOUTH IF UNCONSCIOUS. GUARD AGAINST ASPIRATION INTO LUNGS. OBTAIN IMMEDIATE MEDICAL ATTENTION. SKIN-START RINSING & CONTINUE RINSING WHILE REMOVING CONTAMINATED CLOTHES. WASH CONTAMINATED SKIN WITH SOAP & WATER FOR 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION OCCURS OR PERSISTS.

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Handling and Disposal

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Spill Release Procedures: ELIMINATE SOURCES OF IGNITION. ISOLATE HAZARD AREA & RESTRICT ACCESS. WORK UPWIND OF SPILL. AVOID DIRECT CONTACT WITH SPILLED MATERIAL. WEAR APPROPRIATE BREATHING APPARATUS. STOP LEAK ONLY IF SAFE TO DO SO. DIKE & CONTAIN LAND SPILL. CONTAIN RUNOFF. REMOVE LARGE SPILLS BY MECHANICAL MEANS & CONTAINERIZE. ABSORB

RB SMALL SPILLS, SCOOP UP

& PLACE IN A APPROPRIATE CONTAINER FOR DISPOSAL.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods: WASTE MANAGEMENT PRIORITIES (DEPENDING ON VOLUMES & CONCENTRATION): 1-RECYCLE/REPROCESS; 2-ENERGY RECOVERY; 3-INCINERATION; 4-DISPOSAL AT A LICENSED WASTE DISPOSAL FACILITY. DO NOT ATTEMPT TO COMBUST WASTE ON-SITE. INCINERATE AT A LICENSED WASTE DISPOSAL SITE WITH APPROVAL OF ENVIRONMENTAL AUTHORITY .

Handling And Storage Precautions:

ELIMINATE ALL IGNITION SOURCES. AVOID

PROLONGED EXPOSURE TO VAPORS. WEAR SUITABLE GLOVES & EYE PROTECTION. BOND & GROUND TRANSFER CONTAINERS & EQUIPMENT TO AVOID SSTATIC ACCUMULATION. EMPTY CONTAINERS ARE HAZARDOUS, MAY OBTAIN FLAMMABLE/EXPLOSIVE LIQUID RESIDUE OR VAPORS.

Other Precautions: KEEP AWAY FROM SPARKS & OPEN FLAMES.

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Fire and Explosion Hazard Information
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Flash Point Method: TCC

Flash Point: =-10.C, 14.F

Autoignition Temp: =399.C, 750.2F

Autoignition Temp Text: DEG C

Lower Limits: 2

Upper Limits: 12

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

Fire Fighting Procedures: DO NOT ENTER CONFINED FIRE SPACE WITHOUT ADEQUATE PROTECTIVE CLOTHING AND AN APPROVED POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS. EVACUATE HAZARD AREA. USE WATER TO COOL FIRE EXPOSED CONTAINERS.

Unusual Fire/Explosion Hazard:

FLAMMABLE. CONTAINERS MAY EXPLODE IN HEAT OF FIRE. VAPOURS MAY CONCENTRATE IN CONFINED AREAS.

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Control Measures
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Respiratory Protection: WEAR A NIOSH-APPROVED RESPIRATOR IF EXPOSURE EXCEEDS EXPOSURE LIMITS. USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE. PROPER EQUIPMENT FOR HIGH CONCENTRATIONS IN

CLUDES ATMOSPHERE SUPPLIED, POSITIVE PRESSURE DEMAND,
SELF-CONTAINED OR AIRLINE BREATHING APPARATUS.

Ventilation: MECHANICAL VENTILATION IS RECOMMENDED FOR ALL INDOOR SITUATIONS TO
CONTROL FUGITIVE EMISSIONS.

Protective Gloves: IMPERVIOUS GLOVES(VITON, NITRITE) BE WORN AT ALL TIMES WHEN
HANDLING MATERIAL.

Eye Protection: CHEMICAL SAFETY GOGGLES SHOULD BE WORN. PROVIDE AN EYEWASH
STATION IN THE AREA.

Other Protective Equipment: IMPERVIOUS CLOTHING (APRON, COVERALLS) SHOULD ALSO
BE WORN

IN CONFINED WORKSPACES OR WHERE THE RISK OF SKIN EXPOSURE IS MUCH
HIGHER. SAFETY SHOWERS SHOULD BE AVAILABLE FOR EMERGENCY USE.

Work Hygienic Practices: LAUNDER CONTAMINATED CLOTHING PRIOR TO REUSE. USE GOOD
PERSONAL HYGIENE. AIR-DRY CONTAMINATED CLOTHING IN A WELL-VENTILATED AREA
BEFORE LAUNDERING.

Supplemental Safety and Health: ELECTRICAL AND MECHANICAL EQUIPMENT SHOULD BE
EXPOSITION-PROOF. CONCENTRATIONS IN AIR SHOULD BE MAINTAINED BELOW THE
RECOMMENDED THRESHOLD LIMIT VALUE IF UNPRO

TECTED PERSONNEL ARE INVOLVED. FOR

PERSONNE L ENTRY INTO CONFINED SPACES(IE. BULK STORAGE TANKS) A PROPER
CONFINED SPACE ENTRY PROCEDURE MUST BE FOLLOWED INCLUDING

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Physical/Chemical Properties
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HCC: F2

B.P. Text: DEG C (82 - 83)

M.P/F.P Text: DEG C (-86 - -89)

Vapor Pres: MMHG@DEG C (>33.0@20)

Vapor Density: AIR=1(2.1)

Spec Gravity: H2O=1 (0.79)

Evaporation Rate & Reference:

NBUAC=1 (1.44)

Solubility in Water: COMPLETE

Appearance and Odor: COLOURLESS CLEAR ALCOHOL ODOUR

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Reactivity Data
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Stability Indicator: YES

Stability Condition To Avoid: AVOID EXCESSIVE HEAT, OPEN FLAMES AND ALL
IGNITION SOURCES. SENSITIVITY TO STATIC DISCHARGE.

Materials To Avoid: AVOID CONTACT WITH STRONG OXIDIZING AGENTS AND ACIDS.
ALUMINUM AT HIGH TEMPERATURES.

Hazardous Decomp

osition Products: VAPOUR FORMS A FLAMMABLE/EXPLOSIVE MIXTURE WITH AIR BETWEEN UPPER AND LOWER FLAMMABLE LIMITS. CARBON MONOXIDE AND CARBON DIOXIDE ARE PRODUCED ON COMBUSTION.

Hazardous Polymerization Indicator: NO

Conditions To Avoid Polymerization: NONE SPECIFIED BY MANUFACTURER.

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Toxicological Information

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Toxicological Information: ISOPROPANOL TESTED NEGATIVE IN TWO MUTAGENICITY ASSAYS; THE MOUSE MICRONUCLEUS & CHINESE HAMSTER OVARY ASSAYS. ISOPROPANOL, WHEN ADMINISTERED ORALLY TO RATS & RABBITS, PRODUCES REDUCED FETAL BODY WEIGHT IN RATS ONLY AT DOSES WHICH RESULT IN TREATMENT RELATED MATERNAL DEATHS & PRODUCES NO INDICATION OF FETAL EFFECTS IN RABBITS EVEN AT DOSE WHICH RESULTED IN SIGNIFIGANT MATERNAL MORTALITY. ISOPROPA NOL PRODUCES NO EVIDENCE OF DEVELOPMENTAL NEUROTOXICITY.

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Ecologica
l Information

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Ecological: MAY BE HARMFUL TO AQUATIC LIFE. AQUATIC TOXICITY RATING (TLM 96)=10 TP 100 PPM. NO FOOD CHAIN CONCENTRATION POTENTIAL. BIODEGRADABILITY/Biodegradable(Fast): RAPID VOLITILIZATION. NOTE: DO NOT ALLOW PR ODUCT OR RUN-OFF FROM FIRE CONTROL TO ENTER STORM OR SANITARY SEWRS, LAKES, RIVERS, STREAMS OR PUBLIC WATERWAYS. BLOCK OFF DRAINS & DITCHES. PROVINCIAL REGULATIONS REQUIRE & FEDERAL REGULATIONS MAY RE QUIRE THAT ENVIRONMENTAL AGENCIES BY NOTIFIED OF A SPILL INCIDENT. SPILL AREA MUST BE CLEANED & RETURNED TO ORIGINAL CONDITION OR TO THE SATISFACTION OF AUTHORITIES.

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MSDS Transport Information

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Transport Information: SHIPPING NAME: ISOPROPANOL. CLASS: 3 FLAMMABLE LIQUID. PACKING GROUP: II. UN NUMBER: 1219.

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Regulato
ry Information

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Sara Title III Information: NONE SPECIFIED BY MANUFACTURER.
Federal Regulatory Information: NONE SPECIFIED BY MANUFACTURER.
State Regulatory Information: NONE SPECIFIED BY MANUFACTURER.

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Other Information

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Other Information: PRODUCT USE: ORGANIC SOLVENT. CANADIAN WHIMIS: CLASS B2: FLAMMABLE LIQUID. CLASS D2B: OTHE

R TOXIC EFFECTS - EYE IRRITANT.

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Transportation Information
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Responsible Party Cage: 36131
Trans ID NO: 148429
Product ID: ISOPROPYL ALCOHOL, ACS
MSDS Prepared Date: 09/10/1997
Review Date: 09/16/1999
MFN: 1
Net Unit Weight: 6.6 LB
Multiple KIT Number: 0
Unit Of Issue: GL
Container QTY: 4
Type Of Container: BOTTLE
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Detail DOT Inform
ation
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DOT PSN Code: HWY
DOT Proper Shipping Name: ISOPROPANOL OR ISOPROPYL ALCOHOL
Hazard Class: 3
UN ID Num: UN1219
DOT Packaging Group: II
Label: FLAMMABLE LIQUID
Special Provision: T1
Packaging Exception: 150
Non Bulk Pack: 202
Bulk Pack: 242
Max Qty Pass: 5 L
Max Qty Cargo: 60 L
Vessel Stow Req: B
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Detail IMO Information
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IMO
PSN Code: ITA
IMO Proper Shipping Name: ISOPROPANOL
IMDG Page Number: 3244
UN Number: 1219
UN Hazard Class: 3.2
IMO Packaging Group: II
Subsidiary Risk Label: -
EMS Number: 3-06
MED First Aid Guide NUM: 305
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Detail IATA Information
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IATA PSN Code: ONH
IATA UN ID Num: 1219
IATA Proper Shipping Name: ISOPROPANOL
IATA UN Class: 3
IATA Label: FLAMMABLE LIQUID
UN Packing Group: II
Packing No

te Passenger: 305
Max Quant Pass: 5L
Max Quant Cargo: 60L
Packaging Note Cargo: 307

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Detail AFI Information
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AFI PSN Code: ONH
AFI Proper Shipping Name: ISOPROPANOL
AFI Hazard Class: 3
AFI UN ID NUM: UN1219
AFI Packing Group: II
Special Provisions: P5
Back Pack Reference: A7.3

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HAZCOM Label
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Product ID: ISOPROPYL ALCOHOL, ACS
Cage: 36131
Company Name: SHELL CHEMICALS CANADA LIMITED
Street: 400 4TH AVE SW STATION C
PO Box: 4280
City: CALGARY, ALBERTA CANADA NK
Zipcode: 00000
Health Emergency Phone: 613.996.6666
Label Required IND: Y
Date Of Label Review: 09/16/1999
Status Code: A
Year Procured: 1999
Origination Code: F
Eye Protection IND: YES
Skin Protection IND: YES
Signal Word: DANGER
Respiratory Protection IND: YES
Health Hazard: Severe
Contact Hazard: Moderate
Fir
e Hazard: Slight
Reactivity Hazard: None

Hazard And Precautions: TARGET ORGANS: NONE SPECIFIED BY MANUFACTURER. ACUTE:
EXPOSURE MAY OCCUR VIA INHALATION, SKIN ABSORPTION & SKIN OR EYE CONTACT.
THIS PRODUCT IS IRRITATING TO THE EYE BUT IS NOT PRIMARY SKIN IRRITANT AFTER
SHORT EXPOSURE & IS NOT A SKIN SENSITIZER. PROLONGED AND REPEATED
CONTACT WITH SKIN CAN CAUSE DEFATTING & DRYING RESULTING IN IRRITATION
& DERMATITIS. EXPOSURE TO HIGH VAPOR CONCENTRATIONS MAY CAUSE EY

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RESPIRATORY TRACT IRRITATION. ALTHOUGH INGESTION IS UNLIKELY, LIQUID WOULD IRRITATE THE UPPER DIGESTIVE TRACT & CENTRAL NERVOUS SYSTEM DEPRESSION.

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