

ASHLAND CHEMICAL CO -- ISOPROPANOL 99 % -- 6810-00-543-7915

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

Product ID:ISOPROPANOL 99 %
MSDS Date:01/26/1998
FSC:6810
NIIN:00-543-7915
Status Code:A
MSDS Number: CKFSS
=== Responsible Party ===
Company Name:ASHLAND CHEMICAL CO
Box:2219
City:COLUMBUS
State:OH
ZIP:43216
Country:US
Info Phone Num:614-790-3333
Emergency Phone Num:800-ASHLAND (1-800-274-5263)
Resp. Party Other MSDS Num.:999.0001444-008.006
Preparer's Name:NOT PROVIDED.
CAGE:34897
=== Contractor Identification ===
Company Name:ASHLAND CHEMICAL CO
Box:2219
City:COLUMBUS
State:OH
ZIP:43216-2219
Country:US
Phone:614-790-3333/800-274-5263
CAGE:34897
Company Name:LORHNETTE ASSOCIATES
Address:1630 E FRANCIS ST UNIT F
Box:City:ONTARIO
State:CA
ZIP:91761
Country:US
Phone:909-923-9788
Contract Num:SP0450-00-M-D841
CAGE:1FDF8

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

Ingr

ed Name:ISOPROPANOL

CAS:67-63-0

RTECS #:NT8050000

= Wt:100.

Other REC Limits:NOT PROVIDED.

OSHA PEL:980 MG/M3;400 PPM

ACGIH TLV:983 MG/M3;400 PPM

ACGIH STEL:1230 MG/M3;500 PPM

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

LD50 LC50 Mixture:NOT PROVIDED.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:EYE: CAN CAUSE IRRITATION, STINGING,
TEARING, REDNESS, AND SWELLING. SKIN:

MAY CAUSE MILD IRRITATION.

PROLONGED/ REPEATED CONTACT MAY DRY SKIN. SYMPTOMS MAY INCLUDE
REDNESS, BURNING, DRYING, CRACKING, AND BURNS. SKIN ABSORPTION IS
POSSIBLE, BUT UNLIKELY THAT RESULTS IN HARMFUL EFFECTS DURING SAFE
HANDLING AND USE. SWALLOWING: SWALLOWING SMALL AMOUNTS DURING
NORMAL HANDLING IS NOT LIKELY TO CAUSE H ARMFUL EFFECTS. SWALLOWING
LARGE AMOUNTS MAY BE HARMFUL. INHALATION: BREATHING SMALL AMOUNTS
OF VAPOR/ MIST IS NOT LIKELY TO CAUSE HARMFUL EFFECT

S. LARGE

AMOUNTS MAY BE HARMFUL. SYMPTOMS USUALLY OCCUR IF PEL EXCEEDED.

Explanation of Carcinogenicity:BASED ON THE AVAILABLE INFORMATION,THIS
MATERIAL IS NOT LISTED AS A CARCINOGEN BY THE INTERNATIONAL AGENCY
FOR RESEARCH ON CANCER, THE NATIONAL TOXICOLOGY PROGRAM, OR THE
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.

Effects of Overexposure:SIGNS AND SYMPTOMS OF EXPOSURE TO THIS MATERIAL
THROUGH BREATHING, SWALLOWING, AND/OR PASSAGE OF THE MATERIAL
THROUGH THE SKIN M

AY INCLUDE: STOMACH OR INTESTINAL UPSET (NAUSEA,
VOMITING, DIARRHEA) IRR ITATIION (NOSE, THROAT, AIRWAYS), CENTRAL
NERVOUS SYSTEM DEPRESSION (DIZZINESS, DROWSINESS, WEAKNESS,
FATIGUE, NAUSEA, HEADACHE, UNCONSCIOUSNESS), LOW BLOOD PRESSURE,
MILD, TEMPORARY CHANGES IN THE LI VER, EFFECTS ON HEART RATE,
RESPIRATORY DEPRESSION (SLOWING OF THE BREATHING RATE), LOSS OF
COORDINATION, CONFUSION, LUNG EDEMA (FLUID BUILDUP IN THE LUNG
TISSUE), KIDNEY DAMAGE, COMA.

Medical Cond

Aggravated by Exposure:NOTE TO PHYSICIANS: PREEXISTING DISORDERS OF THE FOLLOWING ORGANS (OR ORGAN SYSTEMS) MAY BE AGGRAVATED BY EXPOSURE TO THIS MATERIAL: SKIN, LUNG (FOR EXAMPLE, ASTHMA-LIKE CONDITIONS), KIDNEY.

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

First Aid:EYES: IF SYMPTOMS DEVELOP, IMMEDIATELY MOVE INDIVIDUAL AWAY FROM EXPOSURE AND INTO FRESH AIR. FLUSH EYES GENTLY WITH WATER FOR AT LEAST 15 MINUTES WHILE HOLDING EYELIDS APART; SEEK IMMEDIATE

DIATE MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH EXPOSED AREA WITH SOAP AND WATER. IF SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION. SWALLOWING: SEEK MEDICAL ATTENTION. IF DROWSY/UNCONSCIOUS, PLACE INDIVIDUAL ON LEFT SIDE WITH HEAD DOWN. CONTACT PHYSICIAN FOR ADVICE ABOUT WHETHER TO INDUCE VOMITING. INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, BEGIN ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION

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

Flash Point Method:TCC

Flash Point:=-11.7C, 53.F

Autoignition Temp:=-398.9C, 750.F

Lower Limits:2.0%

Upper Limits:12.0%

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

Fire Fighting Procedures:WATER MAY BE INEFFECTIVE. WATER MAY BE USED TO KEEP FIRE-EXPOSED CONTAINERS COOL UNTIL FIRE IS OUT. WEAR A SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WITH APPROPRIATE TURN-OUT

GEAR AND CHEMICAL RESISTANT PERSONAL PROTECTIVE EQUIPMENT.

Unusual Fire/Explosion Hazard:VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR MAY BE MOVED BY VENTILATION AND IGNITED BY PILOT LIGHTS, OTHER FLAMES, SPARKS, HEATERS, SMOKING, ELECTRIC MOTORS, STATIC DISCHARGE, OR OTHER IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL HANDLING POINT.

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

Spill Release Procedures:SMALL

SPILL: ABSORB ON VERMICULITE, FLOOR

ABSORBENT OR OTHER ABSORBENT MATERIAL. LARGE SPILL: ELIMINATE ALL IGNITION SOURCES. WEAR PROTECTIVE EQUIPMENT. STOP SPILL AT SOURCE. PREVENT FROM ENTERING SEWERS, DRAINS, ETC. PREVENT FROM SPREADING. IF RUNOFF OCCURS, NOTIFY AUTHORITIES AS REQUIRED. PUMP OR VACUUM TRANSFER TO CLEAN CONTAINERS FOR RECOVERY. ABSORB UNRECOVERABLE MATERIAL FOR DISPOSAL.

Neutralizing Agent:NOT RELEVANT.

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

Handling and Storage Precautions:CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES (VAPORS, LIQUID, AND/OR SOLID), ALL HAZARD PRECAUTIONS GIVEN IN DATA SHEET MUST BE OBSERVED. FIVE GALLON PAILS, TANK CARS/TRUCKS SHOULD BE GROUNDED AND/OR BONDED WHEN MATERIAL IS TRANSFERRED.

Other Precautions:NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

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

Respiratory Protection:IF WORKPLACE EXPOSURE LIMIT(S) IS EXCEEDED, A NIOSH/MSHA APPROVED AIR SUPPLIED RESIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MSHA RESPIRATOR S (NEGATIVE PRESSURE TYPE) UNDER SPECIFIED CONDITIONS (SEE INDUSTRIAL HYGIENIST). ENGINEERING/ ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

Ventilation:PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV(S).

Protective Gloves:WEAR RESISTANT GLOVES TO PREVENT PROLONGED OR REPEATED CONTACT.

Eye Protection:CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED.

Other Protective Equipment:OSHA REGULATIONS ALSO PERMIT OTHER TYPE SAFETY GLASSES. CONSULT YOUR SAFETY REPRESENTATIVE. TO PREVENT REPEATED OR PROLONGED SKIN CONTACT, WEAR IMPERVIOUS CLOTHING AND

BOOTS.

Work Hygienic Practices:NOT PROVIDED.

Supplemental Safety and Health

NONE

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

HCC:F2

NRC/State Lic Num:NOT RELEVANT.

Boiling Pt:=82.2C, 180.F

B.P. Text:@760 MMHG

Melt/Freeze Pt:=-88.7C, -128.F

Vapor Pres:20.800 MMHG@68.00F

Vapor Density:2.070AIR=1

Spec Gravity:.789@60.00F

VOC Pounds/Gallon:789

pH:NOT RELEVANT.

VOC Grams/Liter:6.58

Viscosity:2.4 CPS

Evaporation Rate & Reference:7.70(ETHYL ETHER)

Solubility in Water

:100%

Appearance and Odor:CLEAR, PT-C0 COLOR 10 MAX TRANSPARENT LIQUID,
SLIGHT ETHANOL/ACETONE-LIKE ODOR

Percent Volatiles by Volume:100.0

Corrosion Rate:NOT PROVIDED

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

Stability Indicator/Materials to Avoid:YES

AVOID CONTACT WITH: ACETALDEHYDE, ACIDS, CHLORINE, ETHYLENE OXIDE
ISOCYANATES, STRONG OXIDIZING AGENTS. DO NOT USE WITH ALUMINUM
EQUIPMENT AT TEMPERATURES ABOVE 120 F.

Stability Condition to Avoid:NOT PROVID

ED.

Hazardous Decomposition Products:MAY FORM: CARBON DIOXIDE AND CARBON
MONOXIDE.

===== Toxicological Information =====

Toxicological Information:NO DATA

===== Ecological Information =====

Ecological:NO DATA

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE
LOCAL, STATE AND FEDERAL REGULATIONS. FOR ASSISTANCE WITH YOUR
WASTE MANA

GEMENT NEEDS-INCLUDING DISPOSAL, RECYCLING AND WASTE
STREAM REDUCTION, CONTACT ASH LAND DISTRIBUTION COMPANY, IC&S
ENVIRONMENTAL SERVICES GROUP AT 800-637-7922.

===== MSDS Transport Information =====

Transport Information:DOT INFORMATION (49CFR 172.101) DOT DESCRIPTION:
ISOPROPANOL, 3, UN1219, I I

===== Regulatory Information =====

SARA Title III Information:SARA SECTION 311/312: HAZARD CLASS-40 CFR
370.2: IMMEDIATE, DELAYED, FIRE. SARA SECTION 313 COMPONENTS - 40

CFR 372.65: NONE.

Federal Regulatory Information:TSCA (TOXIC SUBSTANCES CONTROL ACT)
STATUS: TSCA (UNITED STATES) THE INTENTIONAL INGREDIENTS OF THIS
PRODUCT ARE LISTED.

State Regulatory Information:CALIFORNIA PROPOSITION 65: NONE. NEW

JERSEY RIGHT-TO-KNOW LABEL INFORMATION: ISPPROPYL ALCOHOL 67-63-0.

===== Other Information =====

Disclaimer (provided with this information by the compi
ling agencies):

This information is formulated 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.