

PHOENIX INDUSTRIES INC -- ISOPROPYL ALCOHOL -- 6810-00-286-5435

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

Product ID:ISOPROPYL ALCOHOL

MSDS Date:12/11/2000

FSC:6810

NIIN:00-286-5435

MSDS Number: CKLGN

=== Responsible Party ===

Company Name:PHOENIX INDUSTRIES INC

Address:1519 CHAMBERLYNE PARKWAY

City:RICHMOND

State:VA

ZIP:23222

Country:US

Info Phone Num:804-264-5183

Emergency Phone Num:804-264-5183

Prepa

rer's Name:NOT PROVIDED

Chemtec Ind/Phone:(800)424-9300

CAGE:0YED2

=== Contractor Identification ===

Company Name:PHOENIX INDUSTRIES INC

Address:1519 CHAMBERLAYNE PARKWAY

Box:City:RICHMOND

State:VA

ZIP:23222

Country:US

Phone:804-264-5183/FAX: 264-5535

Contract Num:SP0450-00-M-SB20

CAGE:0YED2

Company Name:PHOENIX INDUSTRIES INC

Address:1519 CHAMBERLAYNE PARKWAY

Box:City:RICHMOND

State:VA

ZIP:23222

Country:US

Phone:804-264-5183/FAX: 264-5535

Contract Num:SP0450-01M-ZA36

CAGE:0YED2

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Composition/Information on Ingredients =====

Ingred Name:ISOPROPYL ALCOHOL

CAS:67-63-0

RTECS #:NT8050000

Minumum % Wt:90.

Maxumum % Wt:100.

OSHA PEL:980 MG/M3;400 PPM

ACGIH TLV:983 MG/M3;400 PPM

ACGIH STEL:1230 MG/M3;500 PPM

Ingred Name:WATER

CAS:7732-18-5

RTECS #:ZC0110000

Minumum % Wt:0.

Maxumum % Wt:10.

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

LD50 LC50 Mixture:LD50 ORAL RAT: 5045 MG/KG

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

Health Hazar

ds Acute and Chronic:INHALATION: VAPORS IRRITATES

RESPIRATORY TRACT. HIGH CONCENTRATIONS HAS NARCOTIC EFFECT, PRODUCING SYMPTOMS OF DIZZINESS, DROWSINESS, HEADACHE, STAGGERING, UNCONSCIOUSNESS AND POSSIBLY DEATH. INGESTIO N: CAN CAUSE DROWSINESS, UNCONSCIOUSNESS, AND DEATH. GASTROINTESTINAL PAIN, CRAMPS, NAUSEA, VOMITING, AND DIARRHEA MAY ALSO RESULT. THE SINGLE LETHAL DOSE, HUMAN ADULT=ABOUT 250 MLS (8 OUNCES). SKIN: CAUSES IRRITATION WITH REDNESS AND PAIN. MAY BE A

BSORBED THROUGH SKIN WITH

POSSIBLE SYSTEMIC EFFECTS. EYE: VAPORS CAUSE EYE IRRITATION. SPLASHES CAUSE SEVERE IRRITATION, POSSIBLE CORNEAL BURNS AND EYE DAMAGE. CHRONIC: SKIN EFFECTS.

Explanation of Carcinogenicity:NONE

Effects of Overexposure:INHALATION: INHALATION OF VAPORS IRRITATES

RESPIRATORY TRACT. EXPOSURE TO HIGH CONCENTRATIONS HAS NARCOTIC EFFECT, PRODUCING SYMPTOMS OF DIZZINESS, DROWSINESS, HEADACHE, STAGGERING, UNCONSCIOUSNESS AN D POSSIBLY DEATH. INGESTION: CA

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CAUSE DROWSINESS, UNCONSCIOUSNESS, AND DEATH. GASTROINTESTINAL PAIN, CRAMPS, NAUSEA, VOMITING, AND DIARRHEA MAY ALSO RESULT. SKIN: CAUSES IRRITATION WITH REDNESS AND P AIN. EYE: VAPORS CAUSE EYE IRRITATION. SPLASHES CAUSE SEVERE IRRITATION, POSSIBLE CORNEAL BURNS AND EYE DAMAGE.

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN

DISORDERS OR IMPAIRED LIVER, KIDNEY, OR PULMONARY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS AGENT.

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

First Aid:INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. INGESTION: GIVE LARGE AMOUNT OF WATER TO DRINK. NEVER GIVE ANY THING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION. SKIN: IMMEDIATELY FLUSH SKIN WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. CALL A PHYSICIAN IF IRRITATION DEVELOPS. EYES: IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. LIFTING EYELIDS OCCASIONALLY. GET MEDICAL ATTENTION IMMEDIATELY.

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

Flash Point Method:CC
Flash Point:=12.2C, 54.F
Autoignition Temp:=398.9C, 750.F
Lower Limits:2.0
Upper Limits:12.7
Extinguishing Media:WATER SPRAY, DRY CHEMICAL, ALCOHOL FOAM OR CARBON DIOXIDE. WATER SPRAY MAY BE USED TO KEEP FIRE EXPOSED CONTAINERS COOL AND DILUTE SPILLS TO NONFLAMMABLE MIXTURES.
Fire Fighting Procedures:WATER SPRAY MAY BE USED TO PROTECT PERSONNEL ATTEMPTING TO STOP LEAK AND DISPERSE VAPORS. IN THE EVENT OF A FIRE, WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE.
Unusual Fire/Explosion Hazard:ABOVE FLASH POINT, VAPOR-AIR MIXTURES ARE EXPLOSIVE WITHIN FLAMMABLE LIMITS NOTED ABOVE. CONTACT WITH STRONG OXIDIZERS MAY CAUSE FIRE OR EXPLOSION. VAPORS CAN FLOW ALONG SURFACES TO DISTANT IGNITION SOURCE & FLASH BACK. SENSITIVE TO STATIC DISCHARGE.

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

Spill Release Procedures:VENTILATE AREA. REMOVE SOURCES OF IGNITION. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. ISOLATE HAZARD AREA. KEEP UNNECESSARY AND UNPROTECTED PERSONNEL FROM ENTERING. CONTAIN AND RECOVER LIQUID WHEN POSSIBLE. USE NON-SPARKING TOOLS AND EQUIPMENT. COLLECT LIQUID

POUR INTO AN APPROPRIATE CONTAINER OR ABSORB WITH AN INERT MATERIAL AND PLACE IN A CHEMICAL WASTE CONTAINER. DO NOT FLUSH TO SEWER.

Neutralizing Agent:NOT RELEVANT

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

Handling and Storage Precautions:PROTECT AGAINST PHYSICAL DAMAGE. STORE IN A COOL, DRY WELL-VENTILATED LOCATION, AWAY FROM ANY AREA WHERE THE FIRE HAZARD MAY BE ACUTE. OUTSIDE OR DETACHED STORAGE IS PREFERRED. SEPARATE FROM INCOMPATIBLES. CONTAINERS SHOULD BE

BONDED AND GROUNDED FOR TRANSFERS TO AVOID STATIC SPARKS.

Other Precautions:STORAGE AND USE AREAS SHOULD BE NO SMOKING AREAS. USE NONSPARKING TYPE TOOLS AND EQUIPMENT, INCLUDING EXPLOSION PROOF VENTILATION. CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTY SINCE THEY RETAIN PRODUCT RESIDUES (VAPORS, LIQUID); OBSERVE ALL WARNINGS AND PRECAUTIONS LISTED FOR THE PRODUCT.

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

Respiratory Protection:

IF THE EXPOSURE LIMIT IS EXCEEDED, A FULL FACEPIECE RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE MAY BE WORK UP TO 50 TIMES THE EXPOSURE LIMIT OR THE MAXIMUM USE CONCENTRATION SPECIFIED BY THE APPROPRIATE REGULATORY AGENCY OR RESPIRATOR SUPPLIER, WHICHEVER IS LOWEST. WARNING: AIR PURIFYING RESPIRATORS DO NOT PROTECT WORKERS IN OXYGEN-DEFICIENT ATMOSPHERE.

Ventilation:A SYSTEM OF LOCAL AND/OR GENERAL EXHAUST IS RECOMMENDED TO KEEP EMPLOYEE EXPOSURES BELOW THE AIRBORNE EXPOSURE LIMITS.

Protective Gloves:NEOPRENE AND NITRILE RUBBER ARE RECOMMENDED MATERIALS.

Eye Protection:CHEMICAL SAFETY GOGGLES AND/OR FULL FACE SHIELD.

Other Protective Equipment:IMPERVIOUS PROTECTIVE CLOTHING, INCLUDING BOOTS, GLOVES. LAB COAT, APRON OR COVERALLS. MAINTAIN EYE WASH FOUNTAIN AND QUICK-DRENCH FACILITIES IN WORK AREA.

Work Hygienic Practices:NOT PROVIDED

Supplemental Safety and Health

ACCORDING TO TT-I-735A GRADE A MAXIMUM WATER CONTENT IS 0.1 %. THE MANUFACTURER HAS O

NLY THIS MSDS COVERING ALL RANGES OF WATER
CONTENTS. FOR EMERGENCIES OR INSTANCES WHERE THE EXPOSURE LEVELS
ARE NOT KNOWN, USE A FULL-FACEPIECE POSITIIVE-PRESSURE, AIR
SUPPLIED RESPIRATOR.

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

HCC:F2
NRC/State Lic Num:NOT RELEVANT
Boiling Pt:=82.2C, 180.F
Melt/Freeze Pt:=-89.C, -128.2F
Decomp Temp:Decomp Text:NOT PROVIDED
Vapor Pres:44 @ 25C(77F)
Vapor Density:2.1 (AIR=1
Spec Gravity:0.79 @ 20C/4C
Viscosity:NOT PROVI
DED
Evaporation Rate & Reference:2.83 (BUAC=1)
Solubility in Water:MISCIBLE
Appearance and Odor:CLEAR, COLORLESS LIQUID, RUBBING ALCOHOL ODOR
Percent Volatiles by Volume:100 WT
Corrosion Rate:NOT PROVIDED

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

Stability Indicator/Materials to Avoid:YES
STRONG OXIDIZERS, ACETALDEHYDE, ACIDS, CHLORINE, ETHYLENE OXIDE,
HYDROGEN-PALLADIUM COMBINATION, HYDROGEN PEROXIDE-SULFURIC ACID
COMBINATION, K TERT-BUTOXIDE, HYPOCHLOROU
S ACID, ISOCYANATES,
NITROFORM, PHOSGENE, ALUMINUM, O
Stability Condition to Avoid:STABLE UNDER ORDINARY CONDITIONS OF USE
AND STORAGE. HEAT, FLAMES, IGNITION SOURCES AND INCOMPATIBLES.
HEAT AND SUNLIGHT CAN CONTRIBUTE TO INSTABILITY.
Hazardous Decomposition Products:CARBON DIOXIDE AND CARBON MONOXIDE MAY
FORM WHEN HEATED TO DECOMPOSITION.

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

Toxicological Information:ORAL RAT LD50: 5045 MG/KG; SKIN RABBIT LD50:

12.8 GM/KG; INHALATION RAT LC50: 16,000 PPM/8-HOUR; INVESTIGATED AS A TUMORIGEN, MUTAGEN, REPRODUCTIVE EFFECTOR.

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Ecological Information
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Ecological:WHEN RELEASED INTO THE SOIL, THIS MATERIAL IS EXPECTED TO QUICKLY EVAPORATE. WHEN RELEASED INTO THE SOIL, THIS MATERIAL MAY LEACH INTO GROUNDWATER. WHEN RELEASED INTO THE SOIL, THIS MATERIAL MAY BIODEGRADE TO A MODERATE EXTENT. WHEN RELEASED TO WATER, THIS MATERIAL IS EXPECTED TO QUICKLY EVAPORATE. WHEN RELEASED INTO THE WATER, THIS MATERIAL IS EXPECTED TO HAVE A HALF-LIFE BETWEEN 1 AND 10 DAYS. WHEN RELEASED INTO THE WATER, THIS MATERIAL MAY BIODEGRADE TO A MODERATE EXTENT. THIS MATERIAL IS NOT EXPECTED TO SIGNIFICANTLY BIOACCUMULATE. LC50/96 HR FOR FISH > 100 MG/L.

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Disposal Considerations
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Waste Disposal Methods:WHATEVER CANNOT BE SAVED FOR RECOVERY OR RECYCLING SHOULD BE HANDLED AS HAZARDOUS WASTE AND SENT TO A RCRA APPROVED INCINERATOR OR DISPOSED IN A RCRA APPROVED WASTE FACILITY. PROCESSING, USE OR CONTAMINATION OF THIS PRODUCT MAY CHANGE THE WASTE MANAGEMENT OPTIONS. STATE AND LOCAL DISPOSAL REGULATIONS MAY DIFFER FROM FEDERAL REGULATIONS.

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MSDS Transport Information
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Transport Information:DOMESTIC (LAND, D.O.T.) PROPER SHIPPING NAME: ISOPROPANOL. HAZARD CLASS: 3. UN NO.: UN1219. PACKING GROUP: II. AIR (ICAO): PROPER SHIPPING NAME: ISOPROPANOL. HAZARD CLASS: 3. UN NO.: UN1219. PACKING GROUP: II.

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Regulatory Information
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SARA Title III Information:SARA 313, ISOPROPYL ALCOHOL (67-63-0), LIST: YES. SARA 302 RQ: NO; TPQ:NO.
Federal Regulatory Information:RCRA/CERCLA: NO; TSCA 261.33-NO; 8(D)-NO.
State Regulatory Information:NOT PROVIDED

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Other Information
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