

EM INDUSTRIES -- ISOPROPYL ALCOHOL -- 6810-00-855-6160

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

Product ID:ISOPROPYL ALCOHOL

MSDS Date:12/03/1999

FSC:6810

NIIN:00-855-6160

Status Code:A

MSDS Number: CKRTY

=== Responsible Party ===

Company Name:EM INDUSTRIES

Address:480 DEMOCRAT ROAD

Box:70

City:GIBBSTOWN

State:NJ

ZIP:08027

Country:US

Info Phone Num:856-423-6300

Emergency Phone Num:(800)-424-9300

Chemtr

ec Ind/Phone:(800)424-9300

CAGE:63612

=== Contractor Identification ===

Company Name:E M SCIENCE DIV OF E M INDUSTRIES INC

Address:480 DEMOCRAT ROAD

Box:70

City:GIBBSTOWN

State:NJ

ZIP:08027

Country:US

Phone:800-222-0342/609-423-6300

CAGE:63612

Company Name:EM SCIENCE CORPORATION

Address:2224 VINEWOOD BLVD

Box:City:ANN ARBOR

State:MI

ZIP:48104

Country:US

Phone:734-668-0118

CAGE:1M6E5

Company Name:RADIAN INTL LLC

Address:8501 N MOPAC BLVD

Box:201088

City:AUSTIN

State:TX

ZIP:78720-1088

Country:US

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hone:512-419-5224
Contract Num:SP0450-00-D-4021
CAGE:29913

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Composition/Information on Ingredients
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Ingred Name:ISOPROPYL ALCOHOL
CAS:67-63-0
RTECS #:NT8050000
= Wt:100.
OSHA PEL:980 MG/M3;400 PPM
ACGIH TLV:983 MG/M3;400 PPM
ACGIH STEL:1230 MG/M3;500 PPM

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Hazards Identification
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LD50 LC50 Mixture:ORAL-RAT LD50: 5045 MG/KG
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:N
O OSHA:NO
Health Hazards Acute and Chronic:EFFECTS OF INGESTION OR INHALATION:
NAUSEA, INTOXICATION, CENTRAL NERVOUS SYSTEM DEPRESSION, HEADACHE,
DECREASED BLOOD RATE, COMA. HIGH VAPOR CONCENTRATIONS CAUSE
IRRITATION OF EYES AND RESPIRATORY SY STEM. CONTACT MAY CAUSE EYE
INJURY, SKIN IRRITATION.
Explanation of Carcinogenicity:THIE MATERIAL IS NOT LISTED (IARC, NTP,
OSHA) AS CANCER CAUSING AGENT.
Effects of Overexposure:EFFECTS OF INGESTION OR INHALATION: NAUSEA,
INTOXICAT
ION, CENTRAL NERVOUS SYSTEM DEPRESSION, HEADACHE,
DECREASED BLOOD RATE, COMA. HIGH VAPOR CONCENTRATIONS CAUSE
IRRITATION OF EYES AND RESPIRATORY SY STEM. CONTACT MAY CAUSE EYE
INJURY, SKIN IRRITATION.
Medical Cond Aggravated by Exposure:RESPIRATORY AND SKIN CONDITIONS.

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First Aid Measures
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First Aid:GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE. SKIN:
WASH THOROUGHLY WITH SOAP AND WATER. EYES: IMMEDIATELY FLUSH
THOROUGH

LY WITH WATER FOR AT LEAST 15 MINUTES. INHALATION: REMOVE TO FRESH AIR; GIVE ARTIFICIAL RESPIRATION IF BREATHING HAS STOPPED. INGESTION: GET IMMEDIATE MEDICAL ATTENTION; IF CONSCIOUS, GIVE WATER FREELY.

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Fire Fighting Measures
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Flash Point Method:TCC

Flash Point:=11.7C, 53.F

Lower Limits:2%

Upper Limits:12%

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

Fire Fighting Procedures:DANGEROUS FIRE & EXPLOSIVE HAZARD. WE
AR

SELF-CONTAINED BREATHING APPARATUS.

Unusual Fire/Explosion Hazard:DANGEROUS FIRE & EXPLOSIVE HAZARD. VAPOR CAN TRAVEL DISTANCES TO IGNITION SOURCE & FLASHBACK. HOT ORGANIC CHEMICAL VAPORS OR MISTS ARE SUSCEPTIBLE TO SUDDEN SPONTANEOUS COMBUSTION WHEN MIXED WITH AIR. IGNITION MAY OCCUR AT TEMPERATURES BELOW PUBLISHED AUTOIGNITION OR IGNITION TEMPERATURES.

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Accidental Release Measures
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Spill Release Procedures:EVACUATE THE AREA OF ALL
UNNECESSARY

PERSONNEL. WEAR SUITABLE PROTECTIVE EQUIPMENT. ELIMINATE ANY IGNITION SOURCES UNTIL THE AREA IS DETERMINED TO BE FREE FROM EXPLOSION OR FIRE HAZARDS. CONTAIN THE R ELEASE & ELIMINATE ITS SOURCE, IF THIS CAN BE DONE WITHOUT RISK. TAKE UP & CONTAINERIZE FOR PROPER DISPOSAL. COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS ON REPORTING RELEASES.

Neutralizing Agent:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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Handling and Storage
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Handling and Storage Precautions:KEEP CONTAINER CLOSED. STORE IN A COOL AREA AWAY FROM IGNITION SOURCES AND OXIDIZERS. DO NOT BREATHE VAPOR. DO NOT GET IN EYES. AVOID PROLONGED, OR REPEATED SKIN CONTACT. ELECTRICALLY GROUND ALL EQUIP MENT WHEN HANDLING THIS PRODUCT. CHECK PEROXIDE CONTENT BEFORE HEATING.

Other Precautions:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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Exposure Controls/Personal Protection
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Respiratory Protection:IF WORKPLACE EXPO

SURE LIMITS OF PRODUCT OR ANY

COMPONENT IS EXCEEDED, A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MSHA RESPIRATORS (NEGATIVE PRESSURE-TYPE) UNDER SPECIFIED CONDITIONS. ENGINEERING &/OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE
Ventilation: MATERIAL SHOULD BE HANDLED OR TRANSFERRED IN AN APPROVED FUME HOOD OR WITH ADEQUATE VENTILATION.

Protective Gloves: BUTYL

L RUBBER, PVC OR EQUIVALENT SHOULD BE WORN TO PREVENT SKIN CONTACT.

Eye Protection: SAFETY GLASSES WITH SIDE SHIELDS MUST BE WORN AT ALL TIMES.

Other Protective Equipment: EYE WASH AND SAFETY EQUIPMENT SHOULD BE READILY AVAILABLE.

Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING. DO NOT TAKE INTERNALLY.

Supplemental Safety and Health

CATALOG NUMBER(S): PX1830, PX1834, PX1835, PX1836, PAX1838, PX1835P, PX1835S, PX1835T, PX1834PM, PX1837, 9634, 0010458D, 64755.

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

HCC:F2

Boiling Pt: =82.3C, 180.1F

Melt/Freeze Pt: =-88.5C, -127.3F

Vapor Pres: 33 MMHG @20C

Vapor Density: 2.07

Spec Gravity: 0.7854

Evaporation Rate & Reference: 2.88

Solubility in Water: MISCIBLE

Appearance and Odor: CLEAR, COLORLESS LIQUID; CHARACTERISTIC ODOR.

Percent Volatiles by Volume: 100%

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

Stability Indicator/Materials to Avoid: YES

ACIDS, OXIDIZERS, HALOGENS AND HAL

OGEN COMPOUNDS; ALDEHYDES,

HYDROGEN-PALLADIUM COMBINATION, CHLORINE, ETHYLENE OXIDE, ISOCYANATES.

Stability Condition to Avoid: HEAT; CONTACT WITH IGNITION SOURCES.

EXPOSURE TO AIR AND/OR DIRECT SUNLIGHT.

Hazardous Decomposition Products: COX.

Conditions to Avoid Polymerization: DOES NOT OCCUR.

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

Toxicological Information: ORL-HUMAN LDLO: 3570 MG/KG. IHL-RAT LC50: 16000 PPM/8HR. TEST ON LABORATORY ANIMALS INDICATEE MA

TERIAL MAY

PRODUCE MUTAGENIC AND REPRODUCTIVE EFFECTS. CITED IN REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS).

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Ecological Information
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Ecological:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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Disposal Considerations
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Waste Disposal Methods:EPA WASTE NUMBERS: D001. INCINERATION, FUELS BLENDING OR RECYCLE. CONTACT YOUR LOCAL PERMITTED WASTE DISPOSAL SITE (TSD) FOR PERMISSIBLE TREATMENT SITES. ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

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MSDS Transport Information
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Transport Information:ISOPROPANOL (FOR ALL CATALOG NUMBERS EXCEPT PX1837 & 64755). ISOPROPYL ALCOHOL (FOR PX1837 & 64755). DOT ID NUMBER: UN1219.

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Regulatory Information
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SARA Title III Information:SARA 313: YES. DE MINIMUS FOR SARA 313 (%):

0.1. SARA EHS: NO. SARA EHS TPQ: NO.

Federal Regulatory Information:CERCLA RQ: BLANK FIELD. OSHA FLOOR LIST: YES. STCA STATEMENT: THE CAS NUMBER OF THIS PRODUCT IS LISTED ON THE TSCA INVENTORY.

State Regulatory Information:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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Other Information
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