

EXXON CO USA, A DIV OF EXXON CORP. -- 212343,COOLANOL 35R, DIELECTRIC HEAT TRANSFER FLUID -- 9160-00-965-2376

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

Product ID:212343,COOLANOL 35R, DIELECTRIC HEAT TRANSFER FLUID

MSDS Date:06/01/1999

FSC:9160

NIIN:00-965-2376

MSDS Number: CJMDB

=== Responsible Party ===

Company Name:EXXON CO USA, A DIV OF EXXON CORP.

Box:2180

City:HOUSTON

State:TX

ZIP:77252-2180

Count

ry:US

Info Phone Num:800-443-9966/713-656-5949

Emergency Phone Num:713-656-3424

Chemtrec Ind/Phone:(800)424-9300

CAGE:29700

=== Contractor Identification ===

Company Name:EXXON COMPANY U.S.A.

Box:2180

City:HOUSTON

State:TX

ZIP:77252-2180

Country:US

Phone:713-656-5949 / 713-656-3424

Contract Num:SP0560-99-C-0024

CAGE:29700

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

Ingred Name:ORGANOSILICATE ESTER

Minumum % Wt:90.

Maxumum % Wt:95.

Ingred Name:ALIPHATIC POLYESTER

Minum

um % Wt:5.

Maxumum % Wt:10.

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

LD50 LC50 Mixture:ORAL LD50 RAT >5 G/KG OF BODY WEIGHT

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

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

Health Hazards Acute and Chronic:PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE SKIN IRRITATION. PROLONGED OR REPEATED SKIN CONTACT WITH THIS PRODUCT TENDS TO REMOVE SKIN OILS, POSSIBLY LEADING TO IRRITATION & DERMATITIS. PRODUCT

CONTA CTING THE EYES MAY CAUSE EYE IRRITATION.

PRODUCT HAS A LOW ORDER OF ACUTE ORAL & DERMAL TOXICITY, BUT MINUTE AMOUNTS ASPIRATED INTO THE LUNGS DURING INGESTION OR VOMITING MAY CAUSE MILD TO SEVERE PULM ONARY INJURY & POSSIBLY DEATH.

Explanation of Carcinogenicity:IN ACCORDANCE WITH THE CURRENT OSHA HAZARD COMMUNICATION STANDARD CRITERIA, THIS PRODUCT DOES NOT REQUIRE A CANCER HAZARD WARNING. THIS PRODUCT CONTAINS SYNTHETICALLY DERIVED MATERIALS, & AS SUCH IS NOT C

HARACTERIZED BY

CURRENT IARC CLASSIFICATION CRITERIA FOR OILS.I

Effects of Overexposure:EYES: IRRITATION. SKIN: IRRITATION, DEFATTING, DERMATITIS.

Medical Cond Aggravated by Exposure:NONE RECOGNIZED.

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

First Aid:EYE CONTACT:FLUSH WITH WATER FOR 15 MINUTES OR UNTIL IRRITATION SUBSIDES. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH SKIN WITH SOAP AND WATER. IF PRODUCT

IS INJECTED INTO OR UNDER THE SKIN, GET MEDICAL ATTENTION. INHALATION: IF OVERCOME BY VAPOR FROM HOT PRODUCT, REMOVE TO FRESH AIR. IF BREATHING IS IRREGULAR OR HAS STOPPED, START RESUSCITATION; ADMINIS TER OXYGEN, IF AVAILABLE. IF OVEREXPOSED TO OIL MIST, REMOVE FROM FUTHER EXPOSURE UNTIL EXCESSIVE OIL MIST CONDITION SUBSIDES. INGESTION: DO NOT INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.

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

Flash Poin

t Method:COC

Flash Point:=177.C, 350.6F

Autoignition Temp:>254.C, 489.2F

Extinguishing Media:WATER SPRAY(FOG), DRY CHEMICAL, FOAM, CARBON DIOXIDE AND VAPORIZING LIQUID TYPE EXTRINGUISHING AGENTS MAY ALL BE SUITABLE FOR EXTINGUISHING FIRES INVOLVING THIS TYPE OF PRODUCT.

Fire Fighting Procedures:USE WATER TO COOL FIRE EXPOSED CONTAINERS. USE WATER SPRAY TO DISPERSE VAPORS AND PROVIDE PROTECTION FOR PERSONS ATTEMPTING TO STOP A LEAK. MINIMIZE BREATHING OF, VAPOR, FUMES, OR DE

COMPOSITION PR ODUCTS. USE SUPPLIED-AIR BREATHING EQUIPMENT FOR ENCLOSED OR CONFINED SPACES OR AS OTHERWISE NEEDED.

Unusual Fire/Explosion Hazard:"EMPTY" CONTAINERS RETAIN RESIDUE (LIQUID AND/OR VAPOR) AND CAN BE DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRI CITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

===== Accidental Release Measures ===
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Spill Release Procedures:RECOVER FREE PRODUCT. ADD SAND, EARTH, OR OTHER SUITABLE ABSORBENT TO SPILL AREA. MINIMIZE SKIN CONTACT. KEEP PRODUCT OUT OF SEWERS AND WATERCOURSES BY DIKING OR IMPOUNDING. ADVISE AUTHORITIES IF PROD UCT HAS ENTERED OR MAY ENTER SEWERS, WATERCOURSES, OR EXTENSIVE LAND AREAS. ASSURE CONFORMITY WITH APPLICABLE GOVERNMENTAL REGULATIONS.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

===== Handling and Storage =====
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Handling and Storage Precautions:TO PRVENT FIRE OR EXPLOSION RISK FROM STATIC ACCUMULATION AND DISCHARGE, BOND OR GROUND TRANSFER SYSTEM IN ACCORDANCE WITH NATIONAL FIRE PROTECTION ASSOCIATION PUBLICATIONS. KEEP CONTAINERS CLOSED. D O NOT STORE NEAR HEAT, SPARKS, FLAME, OR STRONG OXIDANTS. MINIMIZE BREATHING VAPOR, MIST, OR FUMES.

Other Precautions:AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. REMOVE CONTAMINATED CLOTHING; LAUNDER OR DRY-CLEAN BEFORE

REUSE. REMOVE

CONTAMINATED SHOES AND THOROUGHLY CLEAN BEFORE REUSE; DISCARD IF OIL SOAKED. CLEAN SE SKIN THOROUGHLY AFTER CONTACT, BEFORE BREAKS, AND MEALS, AND AT END OF WORK PERIOD.

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

Respiratory Protection:USE SUPPLIED-AIR RESPIRATORY PROTECTION IN CONFINED OR ENCLOSED SPACES, IF NEEDED.

Ventilation:USE LOCAL EXHAUST TO CAPTURE VAPOR, MISTS, FUMES. PROVIDE ADEQUATE VENTILATION TO PREVENT EXCEEDING EXPOSURE LIMITS OR

BUILDUP OF EXPLOSIVE CONCENTRATIONS

Protective Gloves:CHEMICAL- RESISTANT GLOVES,TO AVOID PROLONGED OR REPEATED SKIN CONTACT.

Eye Protection:SPLASH GOGGLES OR FACE SHIELD WHEN EYE CONTACT MAY OCCUR.

Other Protective Equipment:USE CHEMICAL-RESISTANT APRON OR OTHER IMPERVIOUS CLOTHING, IF NEEDED, TO AVOID CONTAMINATING REGULAR CLOTHING, WHICH COULD RESULT IN PROLONGED OR REPEATED SKIN CONTACT.

Work Hygienic Practices:MINIMIZE BREATHING VAPOR, MIST OR FUMES. AVOID

PROLONGED OR REPEATED CONTACT WITH SKIN. REMOVE CONTAMINATED CLOTHING; LAUNDRER OR DRY-CLEAN BEFORE RE-USE. REMOVE CONTAMINATED SHOES AND THOROUGHLY CLEAN .

Supplemental Safety and Health

NO SMOKING, OR USE OF FLAME OR OTHER IGNITION SOURCES IN WORK AREA.

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

HCC:V5

Boiling Pt:B.P. Text:NA

Vapor Pres:0.009 MMHG @ 149C

Vapor Density:APPROX 17

Spec Gravity:0.889

pH:NA

Viscosity:6.1-6.7 CST @ 100F

Solubility in Water:VERY LO

W SOLUBILITY

Appearance and Odor:CLEAR, OILY LIQUID, MILD, SWEET ODOR.

Percent Volatiles by Volume:NA

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

Stability Indicator/Materials to Avoid:YES

AVOID CONTACT WITH STRONG OXIDANTS SUCH AS LIQUID CHLORINE, CONCENTRATED OXYGEN, SODIUM HYPOCHLORITE, CALCIUM HYPOCHLORITE, ETC., AS THIS PRESENTS A SERIOUS EXPLOSION HAZARD.

Stability Condition to Avoid:THIS PRODUCT IS STABLE AND WILL NOT REACT VIOLENTLY WITH WATER.

Hazar

dous Decomposition Products:FUMES, SMOKE, CARBON MONOXIDE, SULFUR OXIDES, ALDEHYDES, SILICATE ESTERS AND OTHER DECOMPOSITION PRODUCTS, IN THE CASE OF INCOMPLETE COMBUSTION.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Toxicological Information:THIS PRODUCT, AS MANUFACTURED BY EXXON, DOES NOT CONTAIN POLYCHLORINATED BIPHENYLS (PCB'S). IN ACCORDANCE WITH CURRENT OSHA CRITERIA, THIS PRODUCT DOES NOT REQUIRE A CANCER

HAZARD WARNING. HEALTH STUD IES HAVE SHOWN THAT MANY PETROLEUM HYDROCARBONS AND SYNTHETIC LUBRICANTS POSE POTENTIAL HUMAN HEALTH RISKS WHICH MAY VARY FROM PERSON TO PRSON. THIS PRODUCT IS JUDGED TO HAVE AN ACUTE ORAL LD50 (RAT) GREATER THAN 5 G/KG OF BODY WEIGHT, AND AN ACUTE DERMAL LD50 (RABBIT) GREATER THAN 3.16 G/KG OF BODY WEIGHT.

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

Waste Disposal Methods:ASSURE CONFORMITY WITH APPLICABLE GOV ERNMENTAL

REGULATIONS. THIS PRODUCT MAY BE CLASSIFIED AS AN OIL UNDER SECTION 311 OF THE CLEAN WATER ACT. AND UNDER THE POLLUTION ACT. DISCHARGES OR SPILLS INTO OR LEADING TO SURFACE WATERS THAT CAUSE A SHEEN MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER (1-80 0-424-8802).

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

Transport Information:U.S. DOT HAZARDOUS MATERIALS SHIPPING DESCRIPTION: NOT REGULATED.

===== Regulatory Informat ion =====

SARA Title III Information:THIS PRODUCT MAY BE CLASSIFIED AS AN OIL UNDER SECTION III OF THE CLEAN WATER ACT AND UNDER THE OIL POLLUTION ACT. DISCHARGE OR SPILLS INTO OR LEADING TO SURFACE WATERS THAT CAUSE A SHEEN MUST BE REPO RTED TO THE NATIONAL RESPONSE CENTER (1-800-424-8802). (SARA SECTIONS 301-304): NO TPQ FOR PRODUCT OR ANY CONSTITUENT GREATER THAN 1% OR 0.1% (CARCINOGEN). (SARA SECTION 313): NO TOXIC CHEMICAL IS PRE SENT GREATER TH

AN 1% OR 0.1% (CARCINOGEN). (SARA SECTIONS 311-312): NOT APPLICABLE.

Federal Regulatory Information: THIS PRODUCT CONTAINS THE FOLLOWING TSCA 12B REPORTABLE CHEMICAL SURSTANCE: 2-ETHYLHEXANOL CAS # 104-76-7.

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

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