

EXXON COMPANY USA -- 212334, HYJET IV-A PLUS -- 9150-01-096-6497

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

Product ID:212334, HYJET IV-A PLUS

MSDS Date:06/01/1999

FSC:9150

NIIN:01-096-6497

Status Code:A

MSDS Number: CKZXM

=== Responsible Party ===

Company Name:EXXON COMPANY USA

Box:2180

City:HOUSTON

State:TX

ZIP:77252-2180

Country:US

Info Phone Num:713-656-5949; 800-298-4007

Emergency Phone Num:281-834-

3296 (BAYTOWN)

Preparer's Name:NOT PROVIDED.

Chemtrec Ind/Phone:(800)424-9300

CAGE:DO849

=== Contractor Identification ===

Company Name:EXXON COMPANY USA

Box:2180

City:HOUSTON

State:TX

ZIP:77252-2180

Country:US

Phone:713-656-5949; 800-298-4007

CAGE:DO849

Company Name:EXXON MOBIL LUBRICANTS AND PETROLEUM SPECIALTIES CO.

Address:3225 GALLOWS RD

Box:City:FAIRFAX

State:VA

ZIP:22037

Country:US

Phone:703-846-4240

Contract Num:SP0450-01-M-LC15

CAGE:0TS34

===== Composition/Information on Ingre

dients =====

Ingred Name:TRIBUTYL PHOSPHATE  
CAS:126-73-8  
RTECS #:TC7700000  
Minumum % Wt:70.  
Maxumum % Wt:80.  
Other REC Limits:NOT PROVIDED.  
OSHA PEL:5 MG/M3  
ACGIH TLV:2.2 MG/M3;0.2 PPM

Ingred Name:AROMATIC PHOSPHATES  
Minumum % Wt:10.  
Maxumum % Wt:15.  
Other REC Limits:NOT PROVIDED.  
OSHA PEL:NOT PROVIDED.  
ACGIH TLV:NOT PROVIDED.

Ingred Name:POLYMER ADDITIVES  
Minumum % Wt:5.  
Maxumum % Wt:10.  
Other REC Limits:NOT PROVIDED.  
OSHA PEL:NOT PROVIDED.  
ACGIH TLV:NOT PROVIDED.

Ingred Name:ALIPH  
ATIC EPOXIDES  
Minumum % Wt:5.  
Maxumum % Wt:10.  
Other REC Limits:NOT PROVIDED.  
OSHA PEL:NOT PROVIDED.  
ACGIH TLV:NOT PROVIDED.

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

LD50 LC50 Mixture:LD50 (ORAL, RAT) > 5G/KG OF BODY WEIGHT  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:PROLONGED OR REPEATED SKIN CONTACT MAY  
CAUSE SKIN IRRITATION. REPEATED AND PROLONGED OVEREXPOSURE T

O OIL

MISTS MAY RESULT IN DROPLET DEPOSITION, OIL GRANULOMA FORMATION, INFLAMMATION AND INCREASED INC IDENCE OF INFECTION. PROLONGED OR REPEATED CONTACT WITH THIS PRODUCT TENDS TO REMOVE SKIN OILS, POSSIBLY LEADING TO IRRITATION AND DERMATITIS. PRODUCT CONTACTING THE EYES WILL CAUSE EYE IRRITATION. PR ODUCT HAS A LOW ORDER OF ACUTE ORAL AND DERMAL TOXICITY, BUT MINUTE AMOUNTS ASPIRATED INTO THE LUNGS DURING INGESTION OR VOMITING MAY CAUSE MILD TO SEVERE PULMONARY

INJURY AND POSSIBLY DEATH.

Explanation of Carcinogenicity:IN ACCORDANCE WITH THE CURRENT OSHA COMMUNICATION STANDARD CRITERIA, THIS PRODUCT DOES NOT REQUIRE A CANCER HAZARD WARNING. THIS PRODUCT CONTAINS SYNTHETICALLY DERIVED MATERIALS, AND AS SUCH IS NOT CH ARACTERIZED BY CURRENT IARC CLASSIFICATION CRITERIA FOR OILS.

Effects of Overexposure:PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE SKIN IRRITATION. PRODUCT MAY DECOMPOSE AT ELEVATED TEMPERATURES OR UNDER FIRE CONDITIO

NS AND GIVE OFF IRRITATING, NOXIOUS AND TOXIC VAPORS/FUMES. SYMPTOMS FROM ACUTE EXPOSURE IN CONFINED SPACES MAY INCLUDE HEADACHE, NAUSEA, EYE, NOSE AND THROAT IRRITATION. WITH PROLONGED EXPOSURE, SERIOUS HEALTH ONSEQUENCES SUCH AS LUNG DAMAGE AND DEATH MAY OCCUR IF EX POSURES ARE ALLOWED TO CONTINUE WITHOUT PROPER RESPIRATORY PROTECTION.

Medical Cond Aggravated by Exposure:NONE RECOGNIZED.

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

First Aid:EYE C

ONTACT: IF SPLASHED INTO THE EYES, FLUSH WITH CLEAR WATER FOR 15 MINUTES OR UNTIL IRRITATION SUBSIDES. IF IRRITATION PERSISTS, CALL PHYSICIAN. SKIN: IN CASE OF CONTACT, WASH WITH SOAP AND WATER. IF INJECTED INTO/UNDER SKIN, REGARDLESS OF THE APPEARANCE OR ITS SIZE, CONTACT PHYSICIAN IMMEDIATELY. INHALATION: VAPOR PRESSURE IS LOW AND INHALATION NORMALLY IS NOT A PROBLEM. IF OVERCOME BY VAPOR F ROM HOT PRODUCT, IMMEDIATELY REMOVE FROM EXPOSURE AND CALL A PHYSICIAN. IF B

REATHING IS IRREGULAR/HAS STOPPED, START RESUSCITATION, ADMINISTER OXYGEN IF AVAILABLE. INGESTION: IF INGESTED, DO NOT INDUC E VOMITING; CALL PHYSICIAN IMMEDIATELY.

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

Flash Point Method:COC

Flash Point:=177.8C, 352.F

MINIMUM

Autoignition Temp:=407.8C, 766.F

Lower Limits:NOT AVAILABL

Upper Limits:NOT AVAILABL

Extinguishing Media:FOAM, WATER SPRAY (FOG), DRY CHEMICAL, CARBON DIOXIDE AND VAPORIZING LIQUID TYPE EXTI

EXTINGUISHING AGENTS MAY ALL BE

SUITABLE FOR EXTINGUISHING FIRES INVOLVING THIS TYPE OF PRODUCT.

Fire Fighting Procedures:USE WATER TO KEEP FIRE EXPOSED CONTAINERS COOL. IF A LEAK/SPILL HAS NOT IGNITED, USE WATER SPRAY TO DISPERSE THE VAPORS AND TO PROVIDE PROTECTION FOR PERSONS ATTEMPTING TO STOP A LEAK. WATER SPRAY MAY BE USED TO FLUSH SPILLS AWAY. USE SUPPLIED-AIR BREATHING EQUIPMENT FOR ENCLOSED/CONFINED SPACES OR AS OTHERWISE NEEDED.

Unusual Fire/Explosion Hazard:NOT PROVIDED.

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

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

Neutralizing Agent:NOT RELEVANT.

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

Handling and Storage Precautions:USE PRODUCT WITH CAUTION AROUND HEAT, SPARKS, PILOT LIGHTS, STATIC ELECTRICITY, AND OPEN FLAME.

Other Precautions:"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 ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

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

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

Ventilation:USE LOCAL EXHAUST, IF NECESSARY. PROVIDE VENTILATION SUFFICIENT TO PREVENT EXCEEDING RECOMMENDED EXPOSURE LIMIT OR BUILDUP OF EXPLOSIVE CONCENTRATIONS OF VAPOR

Protective Gloves:USE CHEMICAL RESISTANT GLOVES TO AVOID P

ROLONGED OR

REPEATED SKIN CONTACT.

Eye Protection:USE 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:TO PREVENT FIRE OR EXPLOSION RISK FROM STATIC ACCUMULATION AND DISCHARGE, EFFECTVELY BOND AND/OR GROUND PRODUCT TRANSFER SYSTEM IN ACCORDANC

E WITH THE NATIONAL FIRE PROTECTION ASSOCIATION PUBLICATIONS.

Supplemental Safety and Health

MINIMIZE BREATHING VAPOR, MIST OR FUMES. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. REMOVE CONTAMINATED CLOTHING AND LAUNDER OR DRY-CLEAN BEFORE REUSE. ABBREVIATION: N/A = NOT APPLICABLE. N/AV = NOT AVAILABLE. N/K = UNKNOWN. N/P = NOT PROVIDED. N/R = NOT RELEVANT. N/D = NOT DETERMINED. N/E = NOT ESTABLISHED.

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

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CC:V6

NRC/State Lic Num:NOT RELEVANT.

Boiling Pt:=287.8C, 550.F

B.P. Text:APPROXIMATELY

Melt/Freeze Pt:=-56.5C, -70.F

M.P/F.P Text:POUR POINT

Decomp Temp:Decomp Text:NOT PROVIDED.

Vapor Pres:0.5 @ 200F

Vapor Density:N/AV

Spec Gravity:0.995

pH:NEUTRAL

Viscosity:10.33 CST @ 100F

Evaporation Rate & Reference:NO DATA

Solubility in Water:NEGLIGIBLE

Appearance and Odor:CLEAR PURPLE LIQUID, SWEET ODOR

Percent Volatiles by Volume:NEGLIGIBLE

Corrosion Rate:NOT PROVIDED.

===== 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, NITRATES, PEROXIDES, ETC., AS THIS PRESENT A SERIOUS EXPLOSION HAZARD.

Stability Condition to Avoid: WILL NOT REACT WITH WATER.

Hazardous Decomposition Products: FUMES, SMOKE, CARBON MONOXIDE, SULFUR OXIDES, NITROGEN OXIDES, PHOSPHORUS OXIDES, ALDEHYDES AND OTHER DECOMPOSITION

ON PRODUCTS, IN THE CASE OF INCOMPLETE COMBUSTION.

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

Toxicological Information: THIS PRODUCT CONTAINS A TRIARYLPHOSPHATE WHICH WHEN GIVEN IN LARGE ORAL DOSES (4 G/KG) TO HENS CAUSED DELAYED NERVE DAMAGE THAT RESULTED IN LOSS OF COORDINATION AND DIFFICULTY IN WALKING; THESE EFFECTS WERE NOT OBSERVED IN HENS GIVEN 2 G/KG. 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.

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

Ecological: DO NOT DISCHARGE THIS PRODUCT INTO PUBLIC WATERS OR WATERWAYS UNLESS AUTHORIZED BY A NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). ENVIRONMENTAL AND ECOLOGICAL DATA MAY BE AVAILABLE FOR THIS PRODUCT. WRITE OR CALL

EXXON TO OBTAIN FURTHER INFORMATION. REFER TO SECTION 6 AND SECTION 15 FOR ACCIDENTAL RELEASE INFORMATION AND REGULATORY REPORTING INFORMATION.

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

Waste Disposal Methods: OPTIONS FOR DISPOSAL OF THIS PRODUCT MAY DEPEND ON THE CONDITIONS UNDER WHICH IT WAS USED. TO DETERMINE THE PROPER METHOD OF DISPOSAL, REFER TO RCRA (40 CFR 261), AS WELL AS FEDERAL EPA AND STATE AND LOCAL REGULATIONS.

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MSDS Transport Information  
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Transport Information:U.S. DOT HAZARDOUS MATERIALS SHIPPING DESCRIPTION  
TRANSPORTED BY HIGHWAY, RAIL OR AIR (49 CFR 171-180): BULK  
PACKAGINGS (CAPACITY GREATER THAN 119 U.S. GALLONS):  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIARYL  
PHOSPHATES, ISOPROPYLATED), 9, UN 3082, III, MARINE POLLUTANT.  
NON-BULK PACKAGINGS (CAPACITY LESS THAN OR EQUAL TO 119 U.S.  
GALLONS): NOT REGULATED (49 CFR 171-180

, IATA DGR 7.1.5.2)

TRANSPORTED BY MARINE VESSEL: BULK AND NON-BULK PACKAGINGS (IMDG  
7.2.1): ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(TRIARYL PHOSPHATES, ISOPROPYLATED), 9, UN 3082, III, MARINE POL  
LUTANT

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Regulatory Information  
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SARA Title III Information:THRESHOLD PLANNING QUANTITY (TPQ), EPA  
REGULATION 40 CFR 355 (SARA SECTIONS 301-304)  
NO TPQ

FOR PRODUCT OR ANY CONSTITUTE NT GREATER THAN  
1% OR 0.1%

(CARCINOGEN). HAZARDOUS CHEMICAL REPORTING, EPA REGULATION 40 CFR  
370 (SARA SECTIONS 311-312) EPA HAZARD CLASSIFICATION CODES:  
ACUTE, CHRONIC

Federal Regulatory Information:ALL COMPONENTS OF THIS PRODUCT ARE  
LISTED ON THE U.S. TSCA INVENTORY. TOXIC SUBSTANCES CONTROL ACT  
(TSCA) THIS PRODUCT CONTAINS THE FOLLOWING TSCA 12B  
REPORTABLE CHEMICAL SUBSTANCE(S): TRIBUTYL PHOSPHATE CAS #  
126-73-8 TOXIC CHEMICAL RELEASE REPORTING, EPA REGULATION 40 CFR  
372 (SARA SECTION 313) NO TOXIC CHEMICAL IS PRESENT GREATER  
THAN 1% OR 0.1% (CARCINOGEN).

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Other Information  
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