This SDS should be attached or kept with the respective product with which it is associated.

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT:
PRODUCT NAME: MOBIL RARUS 427
PRODUCT DESCRIPTION: BASE OIL AND ADDITIVES
PRODUCT CODE: 201506202040, 606020-00, 970996
INTENDED USE: COMPRESSOR OIL

COMPANY IDENTIFICATION:
SUPPLIER:
EXXON MOBIL CORPORATION
22777 SPRINGWOODS VILLAGE PARKWAY
SPRING, TX. 77389
USA

TRANSPORTATION EMERGENCY PHONE: 800-424-9300 OR 703-527-3887 CHEMTREC

PRODUCT TECHNICAL INFORMATION: 800-662-4525

SECTION 2 HAZARDS IDENTIFICATION

THIS MATERIAL IS NOT HAZARDOUS ACCORDING TO REGULATORY GUIDELINES (SEE MSDS SECTION 15).

OTHER HAZARD INFORMATION:

PHYSICAL / CHEMICAL HAZARDS: NO SIGNIFICANT HAZARDS.

HEALTH HAZARDS:
HIGH-PRESSURE INJECTION UNDER SKIN MAY CAUSE SERIOUS DAMAGE; EXCESSIVE EXPOSURE MAY RESULT IN EYES, SKIN, OR RESPIRATORY IRRITATION.

ENVIRONMENTAL HAZARDS: NO SIGNIFICANT HAZARDS.

NFPA HAZARD ID:
HAZARD CODE:
FLAMMABILITY 1
REACTIVITY 0

NOTE:
THIS MATERIAL SHOULD NOT BE USED FOR ANY OTHER PURPOSE THAN THE INTENDED USE IN SECTION 1 WITH EXPERT ADVICE. HEALTH STUDIES HAVE SHOWN THAT CHEMICAL EXPOSURE MAY CAUSE POTENTIAL HUMAN HEALTH-RISKS WHICH MAY VARY FROM PERSON TO PERSON.

SECTION 3 COMPOSITION INFORMATION ON INGREDIENTS

THIS MATERIAL IS DEFINED AS A MIXTURE.

Hazardous Substances or Complex Substance(s) Required for Disclosure:
NAME CAS# CONCENTRATION* HAZARD CODES
OKA DITHA 6347-95-9 0.1-<1% H215, H317, H411
PHOSPHATE TRADECANIC H411
ACID ETHYLENKLLESTER

* ALL CONCENTRATIONS ARE PERCENT BY WEIGHT UNLESS MATERIAL IS A GAS. GAS CONCENTRATIONS ARE IN PERCENT BY VOLUME.

AS PER PARAGRAPH (H) OF 29 CFR 1910.1200, FORMULATION IS CONSIDERED A TRADE SECRET AND SPECIFIC CHEMICAL IDENTITIES AND EXACT PERCENTAGE (CONCENTRATION) OF COMPOSITION MAY HAVE BEEN WITHHELD. SPECIFIC CHEMICAL IDENTITIES AND EXACT PERCENTAGE COMPOSITION WILL BE PROVIDED TO HEALTH PROFESSIONALS, EMPLOYEES, AND NAMED REPRESENTATIVES IN ACCORDANCE WITH APPLICABLE PROVISIONS OF GRAPH (I).

SECTION 4 FIRST AID MEASURES

INHALATION:
REMOVE FROM FURTHER EXPOSURE, FOR THOSE PROVIDING ASSISTANCE, AVOID EXPOSURE TO YOURSELF OR OTHERS. USE ADAPTED RESPIRATORY PROTECTION IF RESPIRATORY IRRITATION DEVELOPS. MAINE, OR UNCONSCIOUSNESS OCCURS, SEEK IMMEDIATE MEDICAL ASSISTANCE. IF BREATHING HAS STOPPED, ASSIST VENTILATION WITH A MECHANICAL DEVICE OR USE MOUTH-TO-MOUTH RESUSCITATION.

SKIN CONTACT:
WASH CONTACT AREAS WITH SOAP AND WATER IF PRODUCTS ARE INJECTED INTO OR UNDER THE SKIN OR INTO ANY PART OF THE BODY. REGARDLESS OF THE APPEARANCE OF THE WOUND OR ITS SIZE, THE INDIVIDUAL SHOULD BE EVALUATED IMMEDIATELY BY A PHYSICIAN AS A SURGICAL EMERGENCY. EVEN THOUGH INITIAL SYMPTOMS FROM HIGH PRESSURE INJECTION MAY BE MINIMAL OR ABSENT, EARLY SURGICAL TREATMENT WITHIN THE FIRST FEW HOURS MAY SIGNIFICANTLY REDUCE THE ULTIMATE EXTENT OF INJURY.

EYE CONTACT:
FLUSH THOROUGHLY WITH WATER. IF IRRITATION OCCURS, GET MEDICAL ASSISTANCE.

INGESTION:
FIRST AID NOT NORMALLY NOT REQUIRED. SEEK MEDICAL ATTENTION IF DISCOMFORT OCCURS.

SECTION 5 FIRE FIGHTING MEASURES

EXISTING MEDIA:
APPROPRIATE EXTINGUISHING MEDIA:
USE WATER FOG, FOAM, DRY CHEMICAL OR CARBON DIOXIDE (CO2) EXTINGUISH FLAMES.

INAPPROPRIATE EXTINGUISHING MEDIA: STRAIGHT STREAMS OF WATER.

FIRE FIGHTING:
FIRE-FIGHTING INSTRUCTIONS:
EXHAUST AREA, PREVENT RUNOFF FROM FIRE CONTROL OR DILUTION FROM ENTERING STREAMS, SEWERS, OR DRINKING WATER SUPPLY. FIRE FIGHTERS SHOULD USE STANDARD FIRE PROTECTIVE EQUIPMENT AND IN ENCLOSED SPACES, SELF-CONTAINED BREATHING APPARATUS (SCBA). USE WATER SPRAY TO COOL FIRE EXPOSED SURFACES AND TO PROTECT PERSONNEL.

Hazardous Combustion Products:
SMOKE, FUMES, ALDEHYDES, OXIDES OF CARBON, SULFUR OXIDES, INCOMPLETE COMBUSTION PRODUCTS.

FLAMMABILITY PROPERTIES:
FLASH POINT (METHOD): > 210 DEG. C (410 DEG. F) [ASTM D-92]
FLAMMABLE LIMITS (APPROXIMATE VOLUME % IN AIR):
LEL: 0.9
UEL: 7.0

AUTOIGNITION TEMPERATURE: N/D

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES:
IN THE EVENT OF A SPILL OR ACCIDENTAL RELEASE, NOTIFY RELEVANT AUTHORITIES IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. ITS REGULATIONS REQUIRE REPORTING RELEASES OF THIS MATERIAL TO THE ENVIRONMENT WHICH EXCEED THE APPLICABLE REPORTABLE QUANTITY OR QM, WHICH COULD INCLUDE ANY WATERWAY INCLUDING INTERMITTENT DRY CREEKS. THE NATIONAL RESPONSE CENTER CAN BE REACHED AT 800-424-8882.

PROTECTIVE MEASURES:
AVOID CONTACT WITH SPILLED MATERIAL. SEE SECTION 5 FOR FIRE FIGHTING INFORMATION. SEE THE HAZARD IDENTIFICATION SECTION FOR SIGNIFICANT HAZARDS. USE PROTECTIVE GLOVES AND SHOES. SEE SECTION 8 FOR ADVICE ON THE MINIMUM REQUIREMENTS FOR PERSONAL PROTECTIVE EQUIPMENT. ADDITIONAL PROTECTIVE MEASURES MAY BE NEEDED, DEPENDING ON THE SPECIFIC CIRCUMSTANCES AND/OR THE EXPOSURE JUDGMENT OF THE EMERGENCY RESPONDERS.

FOR EMERGENCY RESPONDERS:
RESPIRATORY PROTECTION:
RESPIRATORY PROTECTION WILL BE NEEDED ONLY IN SPECIFIC CASES, E.G., FORMATION OF MISTS, HALF-FACE OR FULL-FACE RESPIRATOR WITH FILTERS FOR DUST/ORGANIC VAPOR OR SELF-CONTAINED BREATHING APPARATUS (SCBA) CAN BE USED DEPENDING ON THE SIZE OF SPILL AND POTENTIAL LEVEL OF EXPOSURE IF THE EXPOSURE CANNOT BE COMPLETELY CHARACTERIZED OR AN OXYGEN DEFICIENT ATMOSPHERE IS POSSIBLE OR ANTICIPATED. SCBA IS RECOMMENDED. GLOVES THAT ARE RESISTANT TO HYDROCARBONS ARE RECOMMENDED. GLASSES MADE OF POLYVINYL ACETATE (PVA) ARE NOT WATER-RESISTANT AND ARE NOT SUITABLE FOR EMERGENCY USE. CHEMICAL GOGGLES ARE RECOMMENDED IF SPLASHES OR CONTACT WITH EYES IS POSSIBLE.

SMALL SPLASHES: NORMAL ANTISTATIC WORK CLOTHES ARE USUALLY ADEQUATE.

LARGE SPLASHES:
FULL BODY SUIT OF CHEMICAL RESISTANT, ANTISTATIC MATERIAL IS RECOMMENDED.

SPILL MANAGEMENT:
LAND SPILL:
STOP LEAK IF YOU CAN DO IT WITHOUT RISK. RECOVER BY PUMPING OR WITH SUITABLE ABSORBENTS.
WATER SPILL:
STOP LEAK IF YOU CAN DO IT WITHOUT RISK. CONFINE THE SPILL IMMEDIATELY WITH BOOMS, WARN OTHERS. WAIT. REMOVE FROM THE SURFACE BY SWIMMING OR WITH SUITABLE ABSORBENTS. SEEK THE ADVICE OF A SPECIALIST BEFORE USING DISPERGANTS.
WATER AND LAND SPILL RECOMMENDATIONS ARE BASED ON THE MOST LIKELY SPILL SCENARIO FOR THIS MATERIAL; HOWEVER, GEOGRAPHIC CONDITIONS, WIND, TEMPERATURE, AND IN THE CASE OF A WATER SPILL, WAVE AND CURRENT DIRECTION AND SPEED MAY GREATLY INFLUENCE THE APPROPRIATE ACTION TO BE TAKEN. FOR THIS REASON, LOCAL EXPERTS SHOULD BE CONSULTED.

NOTE: LOCAL REGULATIONS MAY PRESCRIBE OR LIMIT ACTION TO BE TAKEN.

ENVIRONMENTAL PRECAUTIONS:

LARGE SPILLS:
DRY FAR AHEAD OF LIQUID SPILL FOR LATER RECOVERY AND DISPOSAL.
PREVENT ENTRY INTO WATERWAYS, SEwers, BASEMENTS OR CONFINED AREAS.

SECTION 7 HANDLING AND STORAGE

HANDLING:
THE MATERIAL IS NOT INTENDED FOR USE IN AIR COMPRESSORS FOR BREATHING APPLICATIONS. PREVENT SMALL SPILLS AND LEAKAGE TO AVOID SLIP HAZARD. MATeRIAL CAN ACcumULATE STATIC CHARGES WHICH MAY CAUSE AN ELECTRICAL SPARK OR IGNITION. WHEN THE MATERIAL IS HANDLED IN BULK, AN ELECTRICAL SPARK SHOULD BE DIspelled TO PREVENT ANY HARMFUL VAPORS FROM LIQUIDS OR RESIDUES THAT MAY BE IN THE STORAGE. DURING MOVING OPERATIONS, USE PROPER BONDING AND/OR GROUNDING PROCEDURES. UNFORTUNATELY, AVOID THE utilization OF THE MATERIAL FROM STATIC ACCUMULATION. LSULTS LOCAL APPLICABLE STANDARDS FOR GUIDANCE. ADDITIONAL REFERENCES INCLUDE AMERICAN PETROLEUM INSTITUTE 2003 (PROTECTION AGAINST IGNITIONS ARISING OUT OF STATIC, LIGHTNING AND STATIC CURRENT) OR NATIONAL FIRE PROTECTION AGENCY 72 (RECOMMENDED PRACTICE ON STATIC ELECTRICITY) OR CAN/NEC C22.1 50404 (ELCROSTATICS - CODE OF PRACTICE FOR THE AVOIDANCE OF HAZARDS DUE TO STATIC ELECTRICITY).

STATIC ACCUMULATOR: THIS MATERIAL IS A STATIC ACCUMULATOR.

STORAGE:
THE CONTAINER CHOICE, FOR EXAMPLE STORAGE VESSEL, MAY EFFECT STATIC ACCUMULATION AND DISIPATION. DO NOT STORE IN OPEN OR UNLABELED CONTAINERS. KEEP AWAY FROM INCOMPATIBLE MATERIALS.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS/STANDARDS FOR MATERIALS THAT CAN BE FORMED WHEN HANDLING THIS PRODUCT. WHEN MISTS /AEROSOLS CAN OCCUR THE FOLLOWING ARE RECOMMENDED: 5 mg/M3 - ACGIH TLV (INHALABLE FRACTION), 5 mg/M3 - OSHA PEL. NOTE: LIMITS /STANDARDS SHOWN FOR GUIDANCE ONLY, FOLLOW APPLICABLE REGULATIONS. NO BIOLOGICAL LIMITS ALLOCATED.

ENGINEERING CONTROLS:
THE LEVEL OF PROTECTION AND TYPES OF CONTROLS NEEDED WILL VARY DEPENDING UPON POTENTIAL EXPOSURE CONDITIONS.

PERSONAL PROTECTION:
PERSONAL PROTECTIVE EQUIPMENT SELECTIONS VARY BASED ON POTENTIAL EXPOSURE CONDITIONS, SUCH AS APPLICATIONS, HANDLING PRACTICES, CONCENTRATION AND VENTILATION. INFORMATION ON THE SELECTION OF PROTECTIVE EQUIPMENT FOR USE WITH THIS MATERIAL, AS PROVIDED BELOW, IS BASED UPON INTENDED, NORMAL USAGE.

RESPIRATORY PROTECTION:
IF ENGINEERING CONTROLS DO NOT MAINTAIN AIRBORNE CONTAMINANT CONCENTRATIONS AT A LEVEL, WHICH IS ADEQUATE TO PROTECT WORKER HEALTH, AN APPROVED RESPIRATOR MAY BE REQUIRED. RESPIRATOR SELECTION, USE, AND MAINTENANCE MUST BE IN ACCORDANCE WITH REGULATORY REQUIREMENTS, IF APPLICABLE.

OF RESPIRATORS TO BE CONSIDERED FOR THIS MATERIAL INCLUDE:
- SPECIAL REQUIREMENTS UNDER ORDINARY CONDITIONS OF USE AND WITH ADEQUATE VENTILATION.

FOR HIGH AIRBORNE CONCENTRATIONS, USE AN APPROVED SUPPLIED-AIR RESPIRATOR, OPERATED IN POSITIVE PRESSURE MODE. SUPPLIED AIR RESPIRATORS WITH AN ESCAPE BOTTLE MAY BE APPROPRIATE WHEN OXYGEN LEVELS ARE INADEQUATE. GAS/VAPOR WARNING PROPERTIES ARE POOR, GLOVES PURIFIED FILTER CAPACITY RATE MAY BE EXCEEDED.

HAND PROTECTION:
ANY SPECIFIC GLOVE INFORMATION PROVIDED IS BASED ON PUBLISHED LITERATURE AND GLOVE MANUFACTURER DATA. GLOVE SUITABILITY AND BREAKTHROUGH TIME WILL DIFFER DEPENDING ON THE SPECIFIC USE CONDITIONS. CONTACT THE GLOVE MANUFACTURER FOR SPECIFIC ADVICE ON GLOVE SELECTION AND BREAKTHROUGH TIMES FOR YOUR USE CONDITIONS. INSPECT AND REPLACE WORK OR DAMAGED GLOVES.

THE TYPES OF GLOVES TO BE CONSIDERED FOR THIS MATERIAL INCLUDE:
- NO PROTECTION IS ORDINARILY REQUIRED UNDER NORMAL CONDITIONS OF USE.

EYE PROTECTION:
IF CONTACT IS LIKELY, SAFETY GLASSES WITH SIDE SHIELDS ARE RECOMMENDED.

SKIN AND BODY PROTECTION:
ANY SPECIFIC CLOTHING INFORMATION PROVIDED IS BASED ON PUBLISHED LITERATURE OR MANUFACTURER DATA.

THE TYPES OF CLOTHING TO BE CONSIDERED FOR THIS MATERIAL INCLUDE:
- BODY PROTECTION IS ORDINARILY REQUIRED UNDER NORMAL CONDITIONS OF USE.
- IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE PRACTICES, PRECAUTIONS SHOULD BE TAKEN TO AVOID skin CONTACT.

SPECIFIC HYGIENE MEASURES:
ALWAYS OBSERVE GOOD PERSONAL HYGIENE MEASURES, SUCH AS WASHING AFTER HANDLING THE MATERIAL. BUT BEFORE EATING, DRINKING, AND/OR SMOKING. ROUTINELY WASH WORK CLOTHES AND PROTECTIVE EQUIPMENT TO REMOVE CONTAMINANTS. DISCARD CONTAMINATED CLOTHING AND FOOTWEAR WITHOUT CLEANING. PRACTICE GOOD HOUSEKEEPING.

ENVIRONMENTAL CONTROLS:
- COMPLY WITH APPLICABLE ENVIRONMENTAL REGULATIONS LIMITING DISCHARGE TO AIR, WATER AND SOIL. PROTECT THE ENVIRONMENT BY APPLYING APPROPRIATE CONTROL MEASURES TO PREVENT OR LIMIT EMISSIONS.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

CAL AND CHEMICAL PROPERTIES ARE PROVIDED FOR SAFETY, HEALTH AND ENVIRONMENTAL CONSIDERATIONS ONLY AND MAY NOT FULLY REPRESENT PRODUCT SPECIFICATIONS. CONTACT THE SUPPLIER FOR ADDITIONAL INFORMATION.

GENERAL INFORMATION:

PHYSICAL STATE: LIQUID
COLOR: AMBER
SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY: MATERIAL NOT EXPECTED TO BE HARMFUL TO AQUATIC ORGANISMS.

MOBILITY: BASE OIL COMPONENT: LOW SOLUBILITY AND FLOATS AND IS EXPECTED TO MIGRATE FROM WATER TO THE LAND. EXPECTED TO partition TO SEDIMENT AND WAS/TREATED SOIL.

STABILITY AND DEGRADABILITY:
BASE OIL COMPONENT: EXPECTED TO BE INHERENTLY BIODEGRADABLE.

BIOACCUMULATION POTENTIAL:
BASE OIL COMPONENT: HAS THE POTENTIAL TO BIOACCUMULATE, HOWEVER METABOLISM OR PHYSICAL PROPERTIES MAY REDUCE THE BIOACCUMULATION OR LIMIT BIOAVAILABILITY.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Disposal recommendations are based on the type of material and the area where it will be disposed. It is important to follow all local and federal regulations.

REGULATORY DISPOSAL INFORMATION:
RCRA INFORMATION: THE UNUSED PRODUCT, IN OUR OPINION, IS NOT SPECIFICALLY LISTED BY THE EPA AS A HAZARDOUS WASTE (40 CFR, PART 261). NOR IS IT FORMULATED TO CONTAIN MATERIALS WHICH ARE LISTED AS HAZARDOUS WASTES. IT IS NOT SUBJECT TO THE HAZARDOUS CHARACTERISTICS OF IGNITABILITY, CORROSIVITY OR REACTIVITY AND IS NOT FORMULATED WITH CONTAMINANTS AS DETERMINED BY THE TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP). HOWEVER, USED PRODUCT MAY BE REGULATED.

EMPTY CONTAINER WARNING:
EMPTY CONTAINER WARNING (WHERE APPLICABLE):
EMPTY CONTAINERS MAY CONTAIN RESIDUE AND BE DANGEROUS. DO NOT ATTEMPT TO REFILL OR CLEAN CONTAINERS WITHOUT PROPER INSTRUCTIONS. EMPTY DRUMS SHOULD BE COMPLETELY DRAINED AND SAFELY STORED UNTIL APPROPRIATELY RECONDITIONED OR DISPOSED. EMPTY CONTAINERS SHOULD BE TAKEN FOR RECYCLING / REUSE / RECOVER / RECLAIM / REPROCESS THROUGH SUITABLY QUALIFIED OR LICENSED CONTRACTOR AND IN ACCORDANCE WITH GOVERNMENTAL REGULATIONS. DO NOT PRE-USE, CUT, WELD, BRAKE, SOLDIER, DRILL, DRILL, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14 TRANSPORT INFORMATION

DOT: NOT REGULATED FOR LAND TRANSPORT

MARINE POLLUTANT: NO

AIR (DATA): NOT REGULATED FOR AIR TRANSPORT

SECTION 15 REGULATORY INFORMATION


LISTED OR EXEMPT FROM LISTING/NOTIFICATION ON THE FOLLOWING CHEMICAL INVENTORIES: AICS, DSI, IECSC, KECI, TSQA

SPECIAL CASES:
INVENTORY STATUS:
ENCs:
RESTRICTIONS APPLY

EPCRA SECTION 302: THIS MATERIAL CONTAINS NO EXTREMELY HAZARDOUS SUBSTANCES.

SARA (313/132) REPORTABLE HAZARD CATEGORIES: NONE.

SARA (131) TOXIC RELEASE INVENTORY: THIS MATERIAL CONTAINS NO CHEMICALS SUBJECT TO THE SUPPLIER NOTIFICATION REQUIREMENTS OF THE SARA 313 TOXIC RELEASE PROGRAM.

The following ingredients are cited on the lists below: NONE.

REGULATORY LISTED SEARCHES:
1 = AGCHL ALL
2 = AGCHL A
3 = AGCHL A2
4 = OSHA 2
5 = TSQA A
6 = TSQA SA2
7 = TSQA SE
8 = TSQA 6
9 = TSQA 12B
10 = CA P6 CARC
11 = CA P6G REPRO
12 = CA RTK
13 = IL RTK
14 = LA RTK
15 = MI 291
16 = MN 291
17 = MO RTK
18 = PA RTK
19 = WI RTK

CODE KEY:
CARC = CARCINOGENIC
REPRO = REPRODUCTIVE

SECTION 16 OTHER INFORMATION

N/D = NOT DETERMINED
N/A = NOT APPLICABLE

The H-Codes contained in section 3 of this document (for information only):
H315: CAUSES SKIN IRRITATION. SKIN CORROSION/IRRITATION, CAT 2
H317: MAY CAUSE ALLERGIC SKIN REACTION. SKIN SENSITIZATION, CAT 1
H401: TOXIC TO AQUATIC LIFE: ACUTE ENVIRONMENTAL TOXICITY, CAT 2
H411: TOXIC TO AQUATIC LIFE WITH LONG-LASTING EFFECTS: CHRONIC ENVIRONMENTAL TOXICITY, CAT 2

This safety data sheet contains the following revisions:

Updates made in accordance with implementation of GHS requirements.

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