



SECTION 1. MATERIAL AND COMPANY IDENTIFICATION

PRODUCT NAME:

SUPER ALL FLEET 15W/40

VERSION:

SEPTEMBER 2015

MANUFACTURER:

PACIFIC FUNCTIONAL FLUIDS, LLC 2244 PORT OF TACOMA ROAD

TACOMA, WA 98421-3607

CUSTOMER SERVICE:

253-284-4302 / 888-586-7295

EMERGENCY HEALTH AND SAFETY NUMBER:

CHEMTREC: 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION





CLASSIFIED HAZARDS

H412 – HAZARDOUS TO THE AQUATIC ENVIRONMENT, CHRONIC TOXICITY – CATEGORY 3

OTHER HAZARDS

NONE KNOWN

LABEL ELEMENTS

HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS

AVOID RELEASE TO THE ENVIRONMENT; DISPOSE OF CONTENTS / CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS	COMPONENT	PERCENT
64742-54-7	DISTILLATES, PETROLEUM, HYDRO TREATED HEAVY PARAFFINIC	20 - 70
VARIOUS	NON-HAZARDOUS MATERIALS	<25
84605-29-8	ZINC ALKYLDITHIOPHOSPHATE	1.4 – 1.6
74499-35-7	PHENOL, (TETRAPROPENYL) DERIVATIVES	0.11 - 0.12

SECTION 4. FIRST AID MEASURES

EYE CONTACT: IF IRRITATION OR REDNESS FROM EXPOSURE DEVELOPS, FLUSH EYES WITH CLEAN WATER. IF SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION.

SKIN CONTACT: REMOVE CONTAMINATED SHOES AND CLOTHING AND CLEANSE AFFECTED AREA(S) THOROUGHLY BY WASHING WITH MILD SOAP AND WATER OR A WATERLESS HAND CLEANER. IF IRRITATION OR REDNESS DEVELOPS AND PERSISTS, SEEK MEDICAL ATTENTION.

INHALATION (BREATHING): FIRST AID IS NOT NORMALLY REQUIRED. IF BREATHING DIFFICULTIES DEVELOP, MOVE VICTIM AWAY FROM SOURCE OF EXPOSURE AND INTO FRESH AIR IN A POSITION COMFORTABLE FOR BREATHING. SEEK MEDICAL ATTENTION.

INGESTION (SWALLOWING): FIRST AID IS NOT NORMALLY REQUIRED; HOWEVER, IF SWALLOWED AND SYMPTOMS DEVELOP, SEE MEDICAL ATTENTION.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED: INHALATION OF OIL MISTS OR VAPORS GENERATED AT ELEVATED TEMPERATURES MAY CAUSE RESPIRATORY IRRITATION. ACCIDENTAL INGESTION CAN RESULT IN MINOR IRRITATION OF THE DIGESTIVE TRACT, NAUSEA AND DIARRHEA. DRY SKIN AND POSSIBLE IRRITATION WITH REPEATED OR PROLONGED EXPOSURE.

NOTES TO PHYSICIAN: ACUTE ASPIRATIONS OF LARGE AMOUNTS OF OIL-LADEN MATERIAL MAY PRODUCE A SERIOUS ASPIRATION PNEUMONIA. PATIENTS WHO ASPIRATE THESE OILS SHOULD BE FOLLOWED FOR THE DEVELOPMENT OF LONG-TERM SEQUELAE. INHALATION EXPOSURE TO OIL MISTS BELOW CURRENT WORKPLACE EXPOSURE LIMITS IS UNLIKELY TO CAUSE PULMONARY ABNORMALITIES.

SECTION 5. FIREFIGHTING MEASURES

NFPA 704 HAZARD CLASS:

HEALTH: 0 FIRE: 1 INSTABILITY: 0

HAZARD SCALE: 0 = MINIMAL; 1 = SLIGHT; 2 = MODERATE; 3 = SERIOUS; 4 = SEVERE;

EXTINGUISHING MEDIA: DRY CHEMICAL, CARBON DIOXIDE, FOAM, OR WATER SPRAY IS RECOMMENDED. WATER OR FOAM MAY CAUSE FROTHING OF MATERIALS HEATED ABOVE 212°F/100°C. CARBON DIOXIDE CAN DISPLACE OXYGEN. USE CAUTION WHEN APPLYING CARBON DIOXIDE IN CONFINED SPACES. SIMULTANEOUS USE OF FOAM AND WATER ON THE SAME SURFACE IS TO BE AVOIDED AS WATER DESTROYS THE FOAM.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

UNUSUAL FIRE & EXPLOSION HAZARDS: THIS MATERIAL MAY BURN, BUT WILL NOT IGNITE READILY. IF CONTAINER IS NOT PROPERLY COOLED, IT CAN RUPTURE IN THE HEAT OF A FIRE.

HAZARDOUS COMBUSTION PRODUCTS: COMBUSTION MAY YIELD SMOKE, CARBON MONOXIDE, AND OTHER PRODUCTS OF INCOMPLETE COMBUSTION. OXIDES OF SULFUR, NITROGEN OR PHOSPHORUS MAY ALSO BE FORMED.

SPECIAL PROTECTIVE ACTIONS FOR FIREFIGHTERS: FOR FIRES BEYOND THE INITIAL STAGE, EMERGENCY RESPONDERS IN THE IMMEDIATE HAZARD ARE SHOULD WEAR PROTECTIVE CLOTHING. WHEN THE POTENTIAL CHEMICAL HAZARD IS UNKNOWN, IN ENCLOSED OR CONFINED SPACES, A SELF

CONTAINED BREATHING APPARATUS SHOULD BE WORN. IN ADDITION, WEAR OTHER APPROPRIATE PROTECTIVE EQUIPMENT AS CONDITIONS WARRANT (SEE SECTION 8).

ISOLATE IMMEDIATE HAZARD AREA AND KEEP UNAUTHORIZED PERSONNEL OUT. STOP SPILL/RELEASE IF IT CAN BE DONE SAFELY. MOVE UNDAMAGED CONTAINERS FROM IMMEDIATE HAZARD AREA IF IT CAN BE DONE SAFELY. WATER SPRAY MAY BE USEFUL IN MINIMIZING OR DISPERSING VAPORS AND TO PROTECT PERSONNEL. COOL EQUIPMENT EXPOSED TO FIRE WITH WATER, IF IT CAN BE DONE SAFELY. AVOID SPREADING BURNING LIQUID WITH WATER USED FOR COOLING PURPOSES.

SEE SECTION 9 FOR FLAMMABLE PROPERTIES INCLUDING FLASH POINT AND FLAMMABLE (EXPLOSIVE) LIMITS

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: THIS MATERIAL MAY BURN, BUT WILL NOT IGNITE READILY. KEEP ALL SOURCES OF IGNITION AWAY FROM SPILL/RELEASE. STAY UPWIND AND AWAY FROM SPILL/RELEASE. AVOID DIRECT CONTACT WITH MATERIAL. FOR LARGE SPILLAGES, NOTIFY PERSONS DOWN WIND OF THE SPILL/RELEASE, ISOLATE IMMEDIATE HAZARD AREA AND KEEP UNAUTHORIZED PERSONNEL OUT. WEAR APPROPRIATE PROTECTIVE EQUIPMENT, INCLUDING RESPIRATORY PROTECTION, AS CONDITIONS WARRANT (SEE SECTION 8). SEE SECTIONS 2 AND 7 FOR ADDITIONAL INFORMATION ON HAZARDS AND PRECAUTIONARY MEASURES.

ENVIRONMENTAL PRECAUTIONS: STOP AND CONTAIN SPILL/RELEASE IF IT CAN BE DONE SAFELY. PREVENT SPILLED MATERIAL FROM ENTERING SEWERS, STORM DRAINS, OTHER UNAUTHORIZED DRAINAGE SYSTEMS AND NATURAL WATERWAYS. USE WATER SPARINGLY TO MINIMIZE ENVIRONMENTAL CONTAMINATION AND REDUCE DISPOSAL REQUIREMENTS. IF SPILL OCCURS ON WATER NOTIFY APPROPRIATE AUTHORITIES AND ADVISE SHIPPING OF ANY HAZARD. SPILLS INTO OR UPON NAVIGABLE WATERS, THE CONTIGUOUS ZONE OR ADJOINING SHORELINES THAT CAUSE A SHEEN OR DISCOLORATION ON THE SURFACE OF THE WATER, MAY REQUIRE NOTIFICATION OF THE NATIONAL RESPONSE CENTER (PHONE NUMBER 800-424-8802).

METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP: NOTIFY RELEVANT AUTHORITIES IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. IMMEDIATE CLEANUP OF ANY SPILL IS RECOMMENDED. DIKE FAR AHEAD OF SPILL FOR LATER RECOVERY OR DISPOSAL. ABSORB SPILL WITH INERT MATERIAL SUCH AS SAND OR VERMICULITE AND PLACE IN SUITABLE CONTAINER FOR DISPOSAL. IF SPILLED ON WATER REMOVE WITH APPROPRIATE METHODS (E.G. SKIMMING, BOOMS OR ABSORBENTS). IN CASE OF SOIL CONTAMINATION, REMOVE CONTAMINATED SOIL FOR REMEDIATION OR DISPOSAL IN ACCORDANCE WITH LOCAL REGULATIONS.

RECOMMENDED MEASURES ARE BASED ON THE MOST LIKELY SPILLAGE SCENARIOS FOR THIS MATERIAL; HOWEVER, LOCAL CONDITIONS AND REGULATIONS MAY INFLUENCE OR LIMIT THE CHOICE OF APPROPRIATE ACTIONS TO BE TAKE. SEE SECTION 13 FOR INFORMATION ON APPROPRIATE DISPOSAL.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: KEEP AWAY FROM FLAMES AND HOT SURFACES. WASH THOROUGHLY AFTER HANDLING. USE GOOD PERSONAL HYGIENE PRACTICES AND WEAR APPROPRIATE PERSONAL PROTECTION EQUIPMENT (SEE SECTION 8). SPILLS WILL PRODUCE VERY SLIPPERY SURFACES. USED MOTOR OILS HAVE BEEN SHOWN TO CAUSE SKIN CANCER IN MICE AFTER REPEATED APPLICATION TO THE SKIN WITHOUT WASHING. BRIEF OR INTERMITTENT SKIN CONTACT WITH USED MOTOR IS NOT EXPECTED TO CAUSE HARM IF THE OIL IS THOROUGHLY REMOVED BY WASHING WITH SOAP AND WATER. DO NOT ENTER CONFINED SPACES SUCH AS TANKS OR PITS WITHOUT FOLLOWING PROPER ENTRY PROCEDURES SUCH AS ASTM D-4276 AND 29CFR 1910.146. DO NOT WEAR CONTAMINATED CLOTHING OR SHOES.

CONDITIONS FOR SAFE STORAGE: KEEP CONTAINER(S) TIGHTLY CLOSED AND PROPERLY LABELED. USE AND STORE THIS MATERIAL IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM HEAT AND ALL SOURCES OF IGNITION. STORE ONLY IN APPROVED CONTAINERS. KEEP AWAY FROM ANY INCOMPATIBLE MATERIAL (SEE SECTION 10). PROTECT CONTAINER(S) AGAINST PHYSICAL DAMAGE.

"EMPTY" CONTAINERS RETAIN RESIDUE AND MAY BE DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OF DEATH. "EMPTY" DRUMS SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED AND PROMPTLY SHIPPED TO THE SUPPLIER OR A DRUM RECONDITIONER. ALL CONTAINERS SHOULD BE DISPOSED OF IN AN ENVIRONMENTALLY SAFE MANNER AND IN ACCORDANCE WITH GOVERNMENTAL REGULATIONS. BEFORE WORKING ON OR IN TANKS WHICH CONTAIN OR HAVE CONTAINED THIS MATERIAL, REFER TO OSHA REGULATIONS. ANSI Z49.1 AND OTHER REFERENCES PERTAINING TO CLEANING, REPAIRING, WELDING OR OTHER CONTEMPLATED OPERATIONS.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CHEMICAL NAME	ACGIH	OSHA	OTHER
DISTILLATES, PETROLEUM, HYDRO	TWA: 5mg/m ³	TWA: 5 mg/m ³	
TREATED HEAVY PARAFFINIC	STEL: 10 mg/m ³	AS OIL MIST, IF	
	AS OIL MIST, IF GENERATED	GENERATED	

NOTE: STATE, LOCAL OR OTHER AGENCIES OR ADVISORY GROUPS MAY HAVE ESTABLISHED MORE STRINGENT LIMITS. CONSULT AN INDUSTRIAL HYGIENIST OR SIMILAR PROFESSIONAL OR YOUR LOCAL AGENCIES FOR FURTHER INFORMATION.

ENGINEERING CONTROLS: IF CURRENT VENTILATION PRACTICES ARE NOT ADEQUATE TO MAINTAIN AIRBORNE CONCENTRATIONS BELOW THE ESTABLISHED EXPOSURE LIMITS, ADDITIONAL ENGINEERING CONTROLS MAY BE REQUIRED.

EYE/FACE PROTECTION: THE USE OF EYE PROTECTION THAT MEETS OR EXCEEDS ANSI Z.87.1 IS RECOMMENDED TO PROTECT AGAINST POTENTIAL EYE CONTACT, IRRITATION OR INJURY. DEPENDING ON CONDITIONS OF USE, A FACE SHIELD MAY BE NECESSARY.

SKIN/HAND PROTECTION: THE USE OF GLOVES IMPERVIOUS TO THE SPECIFIC MATERIAL HANDLED IS ADVISED TO PREVENT SKIN CONTACT. USERS SHOULD CHECK WITH MANUFACTURERS TO CONFIRM THE BREAKTHROUGH PERFORMANCE OF THEIR PRODUCTS. SUGGESTED PROTECTIVE MATERIALS: NITRILE

RESPIRATORY PROTECTION: WHERE THERE IS POTENTIAL FOR AIRBORNE EXPOSURE ABOVE THE EXPOSURE LIMIT, A NIOSH CERTIFIED AIR PURIFYING RESPIRATOR EQUIPPED WITH R OR P95 FILTERS MAY BE USED.

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OR IS EQUIVALENT TO OSHA 29 CFR 1910.134 AND ANSI Z88.2 SHOULD BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE. AIR PURIFYING RESPIRATORS PROVIDE LIMITED PROTECTION AND CANNOT BE USED IN ATMOSPHERES THAT EXCEED THE MAXIMUM USE CONCENTRATION (AS DIRECTED BY REGULATION OR THE MANUFACTURER'S INSTRUCTIONS), IN OXYGEN DEFICIENT (LESS THAN 19.5 PERCENT OXYGEN) SITUATIONS OR UNDER CONDITIONS THAT ARE IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH).

SUGGESTIONS PROVIDED IN THIS SECTION FOR EXPOSURE CONTROL AND SPECIFIC TYPES OF PROTECTIVE EQUIPMENT ARE BASED ON READILY AVAILABLE INFORMATION. USERS SHOULD CONSULT WITH THE SPECIFIC MANUFACTURER TO CONFIRM THE PERFORMANCE OF THEIR PROTECTIVE EQUIPMENT. SPECIFIC SITUATIONS MAY REQUIRE CONSULTATION WITH INDUSTRIAL HYGIENE, SAFETY OR ENGINEERING PROFESSIONALS.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: AMBER/BROWN, CLEAR

PHYSICAL FORM: LIQUID

ODOR: PETROLEUM

ODOR THRESHOLD: NO DATA

PH: NOT APPLICABLE

VAPOR DENSITY (AIR = 1): >1

UPPER EXPLOSIVE LIMITS (vol % in air): NO DATA

LOWER EXPLOSIVE LIMITS (vol % in air): NO DATA

EVAPORATION RATE (nBuAc=1): NO DATA

FLAMMABILITY (solid gas): NOT APPLICABLE

VISCOSITY: 12.0 – 16.0 cSt @ 100°C, 117-127 cSt @ 40°C POUR POINT: < -40 °F / < -40 °C

SOLUBILITY IN WATER: NEGLIGIBLE

PARTITION COEFFICIENT (n-octanol/water) (Kow): NO DATA

TEST METHOD: PENSKY-MARTENS CLOSED CUP (PMCC), ASTM D93, EPA 1010

FLASH POINT: $>410 \,^{\circ}$ F $/>210 \,^{\circ}$ C

INITIAL BOILING POINT/RANGE: NO DATA

VAPOR PRESSURE: <1 mm Hg

MELTING/FREEZING POINT: NO DATA AUTO-IGNITION TEMPERATURE: NO DATA

DECOMPOSITION TEMPERATURE: NO DATA

SPECIFIC GRAVITY (water=1): NO DATA

BULK DENSITY: 7.24 – 7.27 LBS/GAL **PARTICLE SIZE:** NOT APPLICABLE

PERCENT VOLATILE: NEGLIGIBLE

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY: NOT CHEMICALLY REACTIVE.

CHEMICAL STABILITY: STABLE UNDER NORMAL AMBIENT AND ANTICIPATED CONDITIONS OF USE.

POSSIBILITY OF HAZARDOUS REACTIONS: HAZARDOUS REACTIONS NOT ANTICIPATED.

CONDITIONS TO AVOID: EXTENDED EXPOSURE TO HIGH TEMPERATURES CAN CAUSE DECOMPOSITION. AVOID ALL POSSIBLE SOURCES OF IGNITION.

INCOMPATIBLE MATERIALS: AVOID CONTACT WITH STRONG OXIDIZING AGENTS AND STRONG REDUCING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS: NOT ANTICIPATED UNDER NORMAL CONDITIONS OF USE. DURING USE IN ENGINES, CONTAMINATION OF OIL WITH LOW LEVELS OF HAZARDOUS FUEL COMBUSTION BY-PRODUCTS (E.G. POLYCYCLIC AROMATIC HYDROCARBONS) MAY OCCUR.

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

SUBSTANCE / MIXTURE

ACUTE TOXICITY	HAZARD	ADDITIONAL INFORMATION	LC50/LD50 DATA
INHALATION	UNLIKELY TO BE HARMFUL		>5 mg/L (mist, estimated)
DERMAL	UNLIKELY TO BE HARMFUL		>2 g/kg (estimated)
ORAL	UNLIKELY TO BE HARMFUL		>5 g/kg (estimated)

SKIN CORROSION/IRRITATION: CAUSES MILD SKIN IRRITATION. REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.

SERIOUS EYE DAMAGE/IRRITATION: CAUSES MILD EYE IRRITATION.

SKIN SENSITIZATION: NO INFORMATION AVAILABLE ON THE MIXTURE; HOWEVER, NONE OF THE COMPONENTS HAVE BEEN CLASSIFIED FOR SKIN SENSITIZATION (OR ARE BELOW THE CONCENTRATION THRESHOLD FOR CLASSIFICATION).

RESPIRATORY SENSITIZATION: NO INFORMATION AVAILABLE.

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): NO INFORMATION AVAILABLE ON THE MIXTURE; HOWEVER, NONE OF THE COMPONENTS HAVE BEEN CLASSIFIED FOR TARGET ORGAN TOXICITY (OR ARE BELOW THE CONCENTRATION THRESHOLD FOR CLASSIFICATION).

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): NO INFORMATION AVAILABLE ON THE MIXTURE; HOWEVER, NONE OF THE COMPONENTS HAVE BEEN CLASSIFIED FOR TARGET ORGAN TOXICITY (OR ARE BELOW THE CONCENTRATION THRESHOLD FOR CLASSIFICATION).

CARCINOGENICITY: NO INFORMATION AVAILABLE ON THE MIXTURE; HOWEVER, NONE OF THE COMPONENTS HAVE BEEN CLASSIFIED FOR TARGET ORGAN TOXICITY (OR ARE BELOW THE CONCENTRATION THRESHOLD FOR CLASSIFICATION).

GERM CELL MUTAGENICITY: NO INFORMATION AVAILABLE ON THE MIXTURE; HOWEVER, NONE OF THE COMPONENTS HAVE BEEN CLASSIFIED FOR TARGET ORGAN TOXICITY (OR ARE BELOW THE CONCENTRATION THRESHOLD FOR CLASSIFICATION).

REPRODUCTIVE TOXICITY: NO INFORMATION AVAILABLE ON THE MIXTURE; HOWEVER, NONE OF THE COMPONENTS HAVE BEEN CLASSIFIED FOR TARGET ORGAN TOXICITY (OR ARE BELOW THE CONCENTRATION THRESHOLD FOR CLASSIFICATION).

INFORMATION ON TOXICOLOGICAL EFFECTS OF COMPONENTS

DISTILLATES, PETROLEUM, HYDRO TREATED HEAVY PARAFFINIC

CARCINOGENICITY: THIS OIL HAS BEEN HIGHLY REFINED BY A VARIETY OF PROCESSES TO REDUCE AROMATICS AND IMPROVE PERFORMANCE CHARACTERISTICS. IT MEETS THE IP-346 CRITERIA OF LESS THAN 3 PERCENT PAH'S AND IS NOT CONSIDERED A CARCINOGEN BY THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER.

PHENOL, (TETRAPROPENYL) DERIVATIVES

REPRODUCTIVE TOXICITY: THIS PRODUCT CONTAINS LOW LEVELS OF PHENOL, (TETRAPROPENYL) DERIVATIVES. RATS GIVEN HIGH, REPEATED DAILY DOSES OF PHENOL, (TETRAPROPENYL) DERIVATIVES BY ORAL INTUBATION EXPERIENCED ADVERSE REPRODUCTIVE EFFECTS. PREGNANT RATS GIVEN HIGH, REPEATED DAILY DOSES OF PHENOL, (TETRAPROPENYL) DERIVATIVES BY ORAL INTUBATION GAVE BIRTH TO PUPS WITH CLEFT PALATE AND SKELETAL MALFORMATIONS AT DOSE LEVELS THAT CAUSED MATERNAL TOXICITY. FOLLOW-UP STUDIES OF PHENOL, (TETRAPROPENYL) DERIVATIVES IN FINISHED LUBRICATION FLUIDS DEMONSTRATED A NO-OBSERVED EFFECT LEVEL OF 1.78 WT%.

SECTION 12. ECOLOGICAL INFORMATION

GHS CLASSIFICATION:

H412 – HAZARDOUS TO THE AQUATIC ENVIRONMENT, CHRONIC TOXICITY – CATEGORY 3 HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS.

TOXICITY: HARMFUL TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

PERSISTENCE AND DEGRADABILITY: THE HYDROCARBONS IN THIS MATERIAL ARE NOT READILY BIODEGRADABLE, BUT SINCE THEY CAN BE DEGRADED BY MICROORGANISMS, THEY ARE INHERENTLY BIODEGRADABLE.

BIOACCUMULATION POTENTIAL: LOG KOW VALUES MEASURED FOR THE HYDROCARBON COMPONENTS OF THIS MATERIAL ARE GREATER THAN 5.3, AND THEREFORE REGARDED AS HAVING THE POTENTIAL TO BIO ACCUMULATE. IN PRACTICE, METABOLIC PROCESSES MAY REDUCE BIOCONCENTRATION.

MOBILITY IN SOIL: VOLATILIZATION TO AIR IS NOT EXPECTED TO BE A SIGNIFICANT FATE PROCESS DUE TO THE LOW VAPOR PRESSURE OF THIS MATERIAL. IN WATER, BASE OILS WILL FLOAT AND SPREAD OVER THE SURFACE AT A RATE DEPENDENT ON VISCOSITY. THERE WILL BE SIGNIFICANT REMOVAL OF HYDROCARBONS FROM THE WATER BY SEDIMENT ABSORPTION. IN SOIL AND SEDIMENT, HYDROCARBON COMPONENTS WILL SHOW LOW MOBILITY WITH ADSORPTION TO SEDIMENTS BEING THE PREDOMINANT PHYSICAL PROCESS. THE MAIN FATE PROCESS IS EXPECTED TO BE SLOW BIODEGRADATION OF THE HYDROCARBON CONSTITUENTS IN SOIL AND SEDIMENT.

OTHER ADVERSE EFFECTS: NONE ANTICIPATED.

SECTION 13. DISPOSAL CONSIDERATIONS

THE GENERATOR OF A WASTE IS ALWAYS RESPONSIBLE FOR MAKING PROPER HAZARDOUS WASTE DETERMINATIONS AND NEEDS TO CONSIDER STATE AND LOCAL REQUIREMENTS IN ADDITION TO FEDERAL REGULATIONS. THIS MATERIAL, IF DISCARDED AS PRODUCED, WOULD NOT BE A FEDERALLY REGULATED RCRA "LISTED" HAZARDOUS WASTE AND IS NOT BELIEVED TO EXHIBIT CHARACTERISTICS OF HAZARDOUS WASTE. SEE SECTIONS 7 AND 8 FOR INFORMATION ON HANDLING, STORAGE AND PERSONAL PROTECTION AND SECTION 9 FOR PHYSICAL/CHEMICAL PROPERTIES. IT IS POSSIBLE THAT THE MATERIAL AS PRODUCED CONTAINS CONSTITUENTS WHICH ARE NOT REQUIRED TO BE LISTED IN THE SDS BUT COULD AFFECT THE HAZARDOUS WASTE DETERMINATION. ADDITIONALLY, USE WHICH RESULTS IN CHEMICAL OR PHYSICAL CHANGE OF THIS MATERIAL COULD SUBJECT IT TO REGULATION AS A HAZARDOUS WASTE. THIS MATERIAL UNDER MOST INTENDED USES WOULD BECOME "USED OIL" DUE TO CONTAMINATION BY PHYSICAL OR CHEMICAL IMPURITIES. WHENEVER POSSIBLE, RECYCLE USED OIL IN ACCORDANCE WITH APPLICABLE FEDERAL AND STATE OR LOCAL REGULATIONS. CONTAINER CONTENTS SHOULD BE COMPLETELY USED AND CONTAINERS SHOULD BE EMPTIED PRIOR TO DISCARD.

SECTION 14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT)
DOT SHIPPING NAME: NOT REGULATED

NOTE: IF SHIPPED BY LAND IN PACKAGING HAVING A CAPACITY OF 3,500 GALLONS OR MORE, THE PROVISIONS OF 49 CFR, PART 130 APPLY. (CONTAINS OIL)

INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)

IMDG SHIPPING NAME: NOT REGULATED

NOTE: US DOT COMPLIANCE REQUIREMENTS MAY APPLY. SEE 49 CFR 171.22, 23, & 25.

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

NOT APPLICABLE

INTERNATIONAL CIVIL AVIATION ORG. / INTERNATIONAL AIR TRANSPORT ASSOC. (ICAO/IATA)

UN/ID#: NOT REGULATED

NOTE: US DOT COMPLIANCE REQUIREMENTS MAY APPLY. SEE 49 CFR 171.22, 23, & 24.

SECTION 15. REGULATORY INFORMATION

CERCLA/SARA – SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES AND TPQs IN POUNDS:

THIS MATERIAL DOES NOT CONTAIN ANY CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SARA 302 AND 40 CFR 372.

CERCLA/SARA SECTION 311/312 (TITLE III HAZARD CATEGORIES):

ACUTE HEALTH HAZARD:

CHRONIC HEALTH HAZARD:

NO NO

NO

FIRE HAZARD: PRESSURE HAZARD:

NO

REACTIVE HAZARD:

NO

CERCLA/SARA SECTION 313 & 40 CFR 372:

THIS MATERIAL CONTAINS THE FOLLOWING CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III AND 40 CFR 372:

CHEMICAL NAME	CONCENTRATION ¹	De minimis
ZINC COMPOUND(S)	1.4 – 1.6	1.0%

¹ALL CONCENTRATIONS ARE PERCENT BY WEIGHT UNLESS INGREDIENT IS A GAS. GAS CONCENTRATIONS ARE IN PERCENT BY VOLUME.

EPA (CERCLA) REPORTABLE QUANTITY (IN POUNDS):

THIS MATERIAL DOES NOT CONTAIN ANY CHEMICALS WITH CERCLA REPORTABLE QUANTITIES.

CALIFORNIA PROPOSITION 65:

THIS MATERIAL DOES NOT CONTAIN ANY CHEMICALS WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM AT CONCENTRATIONS THAT TRIGGER THE WARNING REOUIREMENTS OF CALIFORNIA PROPOSITION 65.

INTERNATIONAL HAZARD CLASSIFICATION

CANADA:

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS (CPR) AND THE SDS CONTAINS ALL THE INFORMATION REQUIRED BY THE REGULATIONS.

WHMIS HAZARD CLASS:

NONE

INTERNATIONAL INVENTORIES

ALL COMPONENTS ARE EITHER LISTED ON THE US TSCA INVENTORY OR ARE NOT REGULATED UNDER TSCA.

ALL COMPONENTS ARE EITHER ON THE DSL OR ARE EXEMPT FROM DSL LISTING REQUIREMENTS.

U.S. EXPORT CONTROL CLASSIFICATION NUMBER: EAR99

SECTION 16. OTHER INFORMATION

PRECAUTIONARY STATEMENTS:

P273 – AVOID RELEASE TO THE ENVIRONMENT

P501 – DISPOSE OF CONTENTS / CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT

GUIDE TO ABBREVIATIONS:

ACGIH = AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS; CASRN = CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER; CEILING = CEILING LIMIT (15 MINUTES)' CERCLA = THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT; EPA = ENVIRONMENTAL PROTECTION AGENCY; GHS = GLOBALLY HARMONIZED SYSTEM; IARC = INTERNATIONAL AGENCY FOR RESEARCH ON CANCER; INSHT = NATIONAL INSTITUTE FOR HEALTH AND SAFETY AT WORK; IOPC = INTERNATIONAL IOL POLLUTION COMPENSATION; LEL = LOWER EXPLOSIVE LIMIT; NE = NOT ESTABLISHED; NFPA = NATIONAL FIRE PROTECTION ASSOCIATION; NTP = NATIONAL TOXICOLOGY PROGRAM; OSHA = OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION; PEL = PERMISSIBLE EXPOSURE LIMIT (OSHA); SARA = SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT; STEL = SHORT TERM EXPOSURE LIMIT (15 MINUTES); TLV = THRESHOLD LIMIT VALUE (ACGIH); TWA = TIME WEIGHTED AVERAGE (8 HOURS); UEL = UPPER EXPLOSIVE LIMIT; WHMIS = WORKER HAZARDOUS MATERIALS INFORMATION SYSTEM (CANADA)

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES:

THE INFORMATION PRESENTED IN THIS SAFETY DATA SHEET IS BASED ON DATA BELIEVED TO BE ACCURATE AS OF THE DATE THIS SAFETY DATA SHEET WAS PREPARED. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. NO RESPONSIBILITY IS ASSUMED FOR ANY DAMAGE OR INJURY RESULTING FROM ABNORMAL USE OR FROM ANY FAILURE TO ADHERE TO RECOMMENDED PRACTICES. THE INFORMATION PROVIDED ABOVE, AND THE PRODUCT, ARE FURNISHED ON THE CONDITION THAT THE PERSON RECEIVING THEM SHALL MAKE THEIR OWN DETERMINATION AS TO THE SUITABILITY OF THE PRODUCT FOR THEIR PARTICULAR PURPOSE AND ON THE CONDITION THAT THEY ASSUME THE RISK OF THEIR USE. IN ADDITION, NO AUTHORIZATION IS GIVEN OR IMPLIED TO PRACTICE ANY PATENTED INVENTION WITHOUT A LICENSE.