



Safety Data Sheet

TRIATHERM 660LP

SECTION 1. MATERIAL AND COMPANY IDENTIFICATION

PRODUCT NAME: TRIATHERM 660LP
VERSION: APRIL 2015
SUPPLIER: PACIFIC FUNCTIONAL FLUIDS, LLC
2244 PORT OF TACOMA ROAD
TACOMA, WA 98421-3607
CUSTOMER SERVICE: 253-284-4302 / 888-586-7295
24 HOUR EMERGENCY CONTACT: CHEMTREC: 1- 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

HEALTH:

ASPIRATION HAZARD, CATEGORY 1

GHS LABEL:

HEALTH HAZARD

SIGNAL WORD: DANGER

HAZARD STATEMENTS:

H304: MAY BE FATAL IS SWALLOWED AND ENTERS AIRWAYS.

PRECAUTIONARY STATEMENTS

RESPONSE:

P301+P310: IF SWALLOWED, IMMEDIATELY CALL A POISON CENTER OR A PHYSICIAN

P331: DO NOT INDUCE VOMITING.

STORAGE:

P405: STORE LOCKED UP.

DISPOSAL:

P501: DISPOSE OF CONTENTS/CONTAINER TO A LICENSED CONTRACTOR OR FACILITY IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

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SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	WT. %	CAS
ALKYL BIPHENYL MIXTURE	*	PROPRIETARY
TRISOPROPYLBIPHENYLS	*	PROPRIETARY

COMMENTS: INGREDIENTS AND COMPOSITION ARE WITHHELD AS TRADE SECRET IN ACCORDANCE WITH 29CFR1910.1299 (i).

SECTION 4. FIRST AID MEASURES

EYE: IRRIGATE WITH FLOWING WATER IMMEDIATELY AND CONTINUOUSLY FOR SEVERAL MINUTES. REMOVE CONTACT LENSES AFTER INITIAL 1-2 MINUTES OF FLUSHING, THEN CONTINUE TO FLUSH FOR SEVERAL MINUTES. CONSULT MEDICAL PERSONNEL IF IRRITATION PERSISTS.

SKIN: REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER FOR SEVERAL MINUTES. CONSULT MEDICAL PERSONNEL IF IRRITATION PERSISTS.

INGESTION: IF SWALLOWED, CALL A PHYSICIAN IMMEDIATELY. INDUCE VOMITING **ONLY** AT THE INSTRUCTION OF A PHYSICIAN. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONCIOUS PERSON. IF MEDICAL ADVICE CANNOT BE OBTAINED, TAKE THE PERSON, PRODUCT CONTAINER AND **SDS** TO THE NEAREST MEDICAL EMERGENCY CENTER

INHALATION: MOVE TO FRESH AIR. IF BREATHING IS DIFFICULT, OXYGEN SHOULD BE ADMINISTERED BY QUALIFIED MEDICAL PERSONNEL. CALL A PHYSICIAN OR TRANSPORT TO A MEDICAL FACILITY IF CONDITIONS PERSIST.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: MAY CAUSE EYE IRRITATION, TEARING, OR BLURRED VISION.

SKIN: MAY CAUSE SKIN IRRITATION, REDDENING, ITCHING, AND INFLAMMATION.

SKIN ABSORPTION: REPEATED OR PROLONGED SKIN CONTACT CAN CAUSE DRYING, ITCHING, CRACKING, AND REDNESS. REPEATED OR PROLONGED SKIN CONTACT WITH LARGE AMOUNT OF THIS MATERIAL CAN ABSORB THROUGH THE SKIN CAUSING TOXIC EFFECTS.

INGESTION: CAN CAUSE IRRITATION OF THE MOUTH, THROAT, AND ESOPHAGUS. . MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, AND DIARRHEA. ASPIRATION INTO THE LUNGS CAN CAUSE CHEMICAL PHEUMONIA AND LUNG DAMAGE.

INHALATION: MAY CAUSE IRRITATION OF NOSE, MUCOUS MEMBRANEES, AND THROAT.

SECTION 5. FIREFIGHTING MEASURES

FLAMMABLE CLASS: NON-FLAMMABLE.

GENERAL HAZARD: DO NOT USE HIGH PRESSURE WATER JET.

EXTINGUISHING MEDIA: WATER OR WATER SPRAY.

HAZARDOUS COMBUSTION PRODUCTS: OXIDES OF CARBON. MAY PRODUCE TOXIC FUMES.

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OTHER CONSIDERATIONS: KEEP ADJACENT CONTAINERS COOL WITH WATER SPRAY.

FIRE FIGHTING PROCEDURES: AS IN ANY FIRE, WEAR SELF-CONTAINED BREATHING APPARATUS PRESSURE-DEMAND, (MSHA/NIOSH APPROVED OR EQUIVALENT) AND FULL PROTECTIVE GEAR.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: CONTAIN AND SOAK UP SPILL WITH NON-COMBUSTIBLE ABSORBENT MATERIAL. DAMPEN AND SCOOP SPILED MATERIAL INTO SUITABLE CONTAINERS, SEAL, AND LABEL. AVOID MIXING SPILLED MATERIAL WITH OTHER CHEMICALS OR DEBRIS. AVOID RUNOFF INTO STORM SEWERS AND DITCHES WHICH LEAD TO WATERWAYS.

LARGE SPILL: AVOID CONTACT WITH SKIN AND EYES. EVACUATE THE AREA OF ALL NON-ESSENTIAL PERSONNEL. SHUT OFF LEAKS, IF POSSIBLE WITHOUT PERSONAL RISK. ABSORB OR CONTAIN LIQUID WITH NON-COMBUSTIBLE ABSORBENT MATERIAL. PLACE IN A LABELLED, SEALABLE CONTAINER FOR SUBSEQUENT SAFE DISPOSAL.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: PREVENT MATERIAL FROM ENTERING DRAINS OR WATERCOURSES USING SAND, EARTHY, OR OTHER APPROPRIATE BARRIERS.

GENERAL PROCEDURES: AVOID CONTACT WITH SKIN OR EYES. AVOID

SPECIAL PROTECTIVE EQUIPMENT: USE PROTECTIVE EQUIPMENT RECOMMENDED IN SECTION 8. WEAR NIOSH APPROVED RESPIRATOR WHEN VENTILATION IS INADEQUATE.

SECTION 7. HANDLING AND STORAGE

GENERAL PROCEDURES: HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES.

HANDLING: USE ONLY IN A WELL VENTILATED AREA. AVOID BREATHING DUST, VAPOR, MIST, OR GAS. AVOID CONTACT WITH EYES, SKIN, AND CLOTHING. KEEP AWAY FROM HEAT AND FLAMES. GROUND AND BOND CONTAINERS WHEN TRANSFERRING MATERIAL. WASH THOROUGHLY AFTER HANDLING.

STORAGE: KEEP CONTAINER TIGHTLY CLOSED IN A DRY, WELL VENTILATED AREA AWAY FROM HEAT, OPEN FLAME, OR SOURCES OF IGNITION. STORE AWAY FROM INCOMPATIBLE MATERIALS. (SEE SECTION 10)

"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. ALL EMPTY CONTAINERS SHOULD BE DISPOSED OF IN AN ENVIRONMENTALLY SAFE MANNER AND IN ACCORDANCE WITH GOVERNMENTAL REGULATIONS.

ELECTROSTATIC ACCUMULATION HAZARD: GROUND AND BOND DURING UNLOADING AND TRANSFERRING MATERIAL TO PREVENT ELECTROSTATIC ACCUMULATION.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: GENERAL VENTILATION SHOULD BE SUFFICIENT FOR MOST OPERATIONS. IF CURRENT VENTILATION PRACTICES ARE NOT ADEQUATE TO MAINTAIN AIRBORNE CONCENTRATIONS BELOW THE ESTABLISHED EXPOSURE LIMITS, ADDITIONAL ENGINEERING CONTROLS MAY BE REQUIRED TO MAINTAIN AIRBORNE LEVELS BELOW EXPOSURE LIMIT REQUIREMENTS OR GUIDELINES. HAVE EYE WASHES AND SHOWERS FOR EMERGENCY USE.

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PERSONAL PROTECTIVE EQUIPMENT:

EYE/FACE PROTECTION: USE SAFETY GLASSES WITH SIDE SHIELDS. USE OF FACE SHIELD IS RECOMMENDED.

SKIN PROTECTION: WEAR CLEAN BODY-COVERING CLOTHING INCLUDING SLEEVES, CHEMICAL RESISTANT GLOVES, BOOTS, AND FACE PROTECTION.

HAND PROTECTION: USE CHEMICALLY RESISTANT GLOVES. PREFERRED GLOVE MATERIALS EXAMPLES ARE: BUTYL RUBBER, LATEX, NEOPRENE, NITRILE, POLYETHYLENE AND PVC. WORKPLACE FACTORS, SUCH AS OTHER CHEMICALS HANDLED, SHOULD ALSO BE TAKEN INTO CONSIDERATION WHEN DETERMINING HAND PROTECTION.

RESPIRATORY PROTECTION: WHERE THERE IS POTENTIAL FOR AIRBORNE EXPOSURE ABOVE THE EXPOSURE LIMIT, A NIOSH CERTIFIED AIR PURIFYING RESPIRATOR EQUIPPED WITH ORGANIC VAPOR CARTRIDGE AND PARTICULATE PRE-FILTER MAY BE USED.

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OR EXCEEDS OSHA STANDARDS 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 SITUATIONS OR UNDER CONDITIONS THAT ARE IMMEDIATELY DANGEROUS TO LIFE AND HEALTH (IDLH).

INGESTION: USE GOOD PERSONAL HYGIENE. DO NOT CONSUME OR STORE FOOD IN THE WORK AREA. WASH HANDS BEFORE SMOKING, DRINKING, EATING, OR USING RESTROOM.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE:	CLEAR LIQUID
PH:	N/A
COLOR:	COLORLESS
DENSITY:	0.96 @ 25 C
BOILING POINT:	292 C
FLASH POINT:	186 C
FLAMMABLE LIMITS:	3 TO 0.5
AUTO IGNITION TEMPERATURE:	440 C
VISCOSITY:	13 CST @ 40 C
POUR POINT:	-29 C

SECTION 10. STABILITY AND REACTIVITY

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

REACTIVITY: NO DANGEROUS REACTION KNOWN UNDER CONDITIONS OF NORMAL USE.

CONDITIONS TO AVOID: EXCESSIVE HEAT SPARKS, OR OPEN FLAMES. AVOID ALL POSSIBLE SOURCES OF IGNITION.

MATERIALS TO AVOID: AVOID CONTACT WITH STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS: NOT ANTICIPATED UNDER NORMAL CONDITIONS OF USE.

HAZARD POLYMERIZATION: WILL NOT OCCUR.

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SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE

ORAL LD50: N/A

INHALATION LC50: NOT ACUTELY TOXIC BY INHALATION. STUDY IN RATS SHOW THIS PRODUCT IS NON-TOXIC BY INHALATION WHEN TESTED AT THE MAXIMUM ACHIEVABLE VAPOR CONCENTRATIONS.

EYE EFFECTS: MINIMAL IRRITATION

SKIN EFFECTS: MINIMAL IRRITATION

CARCINOGENICITY

NOTES: N/A

REPEATED DOSE EFFECTS: REPEATED OR PROLONGED CONTACT MAY CAUSE SKIN DISORDERS.

IRRITATION: NOT A PRIMARY IRRITANT

SENSITIZATION: NOT SENSITIZING TO SKIN.

GENETIC EFFECTS: NONE EXPECTED.

TERATOGENIC EFFECTS: NONE EXPECTED.

MUTAGENICITY: DID NOT SHOW MUTAGENIC EFFECTS IN ANIMAL TESTING.

SECTION 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: NOT CLASSIFIED AS AN ENVIRONMENTAL HAZARD.

BIOACCUMULATION/ACCUMULATION: N/A

AQUATIC TOXICITY (ACUTE):

96 HOUR LC50: >8.24 ug/L

48 HOUR EC50: >4.52 ug/L

CHEMICAL FATE INFORMATION: N/A

SECTION 13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: TREATMENT, STORAGE, TRANSPORTATION, AND DISPOSAL MUST BE IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE/PROVINCIAL, AND LOCAL REGULATIONS.

EMPTY CONTAINER: EMPTY CONTAINER THOROUGHLY AND DISPOSE TO A LICENSED DISPOSAL CONTRACTOR. DO NOT WELD, CUT, OR BRAZE EMPTY CONTAINERS, OR ALLOW PRODUCT RESIDUE TO COME IN CONTACT WITH OTHER SOURCES OF IGNITION AS THEY MAY CONTAIN RESIDUE WHICH COULD IGNITE.

RCRA/EPA WASTE INFORMATION: THIS PRODUCT DOES NOT MEET THE CRITERIA OS A HAZARDOUS WASTE AS DEFINED IN 40 CFR 261 AS IT DOES NOT EXHIBIT THEN CHARACTERISTICS OF HAZARDOUS WASTE.

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SECTION 14. TRANSPORT INFORMATION

DOT NON-BULK: NOT REGULATED
DOT BULK: NOT REGULATED

SECTION 15. REGULATORY INFORMATION

CERCLA REGULATORY: CONTAINS NO CERCLA REGULATED INGREDIENTS AT DETECTABLE LEVELS.

TSCA:

CHEMICAL NAME	WT. %	CAS
ALKYL BIPHENYL MIXTURE	*	PROPRIETARY
TRIISOPROPYLBIPHENYLS	*	PROPRIETARY

COMMENTS: INGREDIENTS AND COMPOSITION ARE WITHHELD AS TRADE SECRET IN ACCORDANCE WITH 29CFR1910.1299 (i).

SECTION 16. OTHER INFORMATION

HAZARD RATING SYSTEM

NFPA	<u>HEALTH</u>	<u>FIRE</u>	<u>REACTIVITY</u>
	1	1	0

HMIS	<u>HEALTH</u>	<u>FLAMMABILITY</u>	<u>PHYSICAL HAZARD</u>
	1	1	0

RECOMMENDED USES AND RESTRICTIONS:

THE INFORMATION PROVIDED IN THIS SAFETY DATA SHEET IS CORRECT TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF AT THE DATE OF ITS PUBLICATION. THE INFORMATION GIVEN IS DESIGNED ONLY AS GUIDANCE FOR SAFE HANDLING, USE, PROCESSING, STORAGE, TRANSPORTATION, DISPOSAL AND RELEASE AND IS NOT CONSIDERED A WARRANTY OR QUALITY SPECIFICATION. THE INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS, UNLESS SPECIFIED IN THE TEXT.

REGULATORY REQUIREMENTS ARE SUBJECT TO CHANGE AND MAY DIFFER FROM ONE LOCATION TO ANOTHER. IT IS THE BUYER'S RESPONSIBILITY TO INSURE THAT IT COMPLIES WITH FEDERAL, STATE/PROVINCIAL AND LOCAL LAWS.