



Material Safety Data Sheet

The Toro Company
 8111 Lyndale Ave S
 Bloomington, MN 55420

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Product Identification

Product Name:	Toro Premium Synthetic Biodegradable Hydraulic Fluid	Parts Number:
Product type:	HYDRAULIC OIL	119-2157, 119-2158
MSDS #	120-3119	
Emergency Contact:	Chemtrec : 1-800-424-9300	
Contact Number:	1-952-888-8801	

Chemical Components

Chemical	CAS #	%	ACGIH TLV	OSHA PEL	Other
This product does not contain any components which have recognized exposure limits.					

Physical and Chemical Properties

Characteristics		Physical Properties		Hazards Description	Physical Dangers
Physical State	liquid	Vapor pressure	mmHg 20 C: < 0.1	Pressurized mists may form a flammable mixture. DOT ERG No. : NA	FLAMMABILITY (solids): NE AUTO FLAMMABILITY: NA EXPLOSIVE PROPERTIES: NA OXIDIZING PROPERTIES: NA STABILITY (THERMAL, LIGHT, ETC.): Stable. CONDITIONS TO AVOID: Extreme heat and high energy sources of ignition. INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers. HAZARDOUS DECOMPOSITION PRODUCTS: Product does not decompose at ambient temperatures. HAZARDOUS POLYMERIZATION: Will not occur
Color	Light Amber	pH	NA		
Odor	Mild	Boiling point/range:	NA		
HMIS Rating		Melting point/range:	NA		
Health:	0	RELATIVE DENSITY	15/4 C: 0.87		
Flammability:	1	Vapor density	NE		
Physical Hazard:	0	Evaporation rate	NE		
		Solubility in water	Negligible		
		VOC content:			
		Flash Point	C(F): > 250(482) (ASTM D-92)		
		PARTITION COEFFICIENT: NE VISCOSITY AT 40 C, cSt: 48.8 VISCOSITY AT 100 C, cSt: 7.8 POUR POINT C(F): < -39(-38) FREEZING POINT C(F): NE VOLATILE ORGANIC COMPOUND: NE DMSO EXTRACT, IP-346 (WT.%): NA			

Health Hazards

Major Routes of Exposure:	Ingredients Considered Hazardous to Health	Potential Health Effects:
Inhalation	Under normal conditions of use, this product is not considered hazardous according to regulatory guidelines	Inhalation.
Skin		
Ingestion	Under normal conditions of intended use, this product does not pose a risk to health.	Skin.
Eye		
	Excessive exposure may result in eye, skin or respiratory irritation.	Eye contact:
		Ingestion:

First Aid Measures	Personal Protection
<p>EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.</p> <p>SKIN CONTACT: Wash contact areas with soap and water. Remove and clean oil soaked clothing daily and wash affected area.</p> <p>INJECTION INJURY WARNING: If product is 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.</p> <p>INHALATION: Not expected to be a problem. However, if respiratory irritation, dizziness, nausea, or unconsciousness occurs due to excessive vapor or mist exposure, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or mouth-to-mouth resuscitation.</p> <p>INGESTION: Not expected to be a problem. Seek medical attention if discomfort occurs. Do not induce vomiting.</p>	<p>VENTILATION: If mists are generated, use adequate ventilation, local exhaust or enclosures to control below exposure limits.</p> <p>RESPIRATORY PROTECTION: If mists are generated, and/or when ventilation is not adequate, wear approved respirator.</p> <p>EYE PROTECTION: If eye contact is likely, safety glasses with side shields or chemical type goggles should be worn.</p> <p>SKIN PROTECTION: Not normally required. When splashing or liquid contact can occur frequently, wear oil resistant gloves and/or other protective clothing. Good personal hygiene practices should always be followed.</p>

Fire and Explosion Hazards

Extinguishing Media	Special Fire Fighting Procedures	Unusual Fire and Explosion Hazards
Carbon dioxide, foam, dry chemical and water fog.	Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus	Pressurized mists may form a flammable mixture. COMBUSTION PRODUCTS: Fumes, smoke, carbon monoxide, carbon dioxide, aldehydes and other decomposition products, in the case of incomplete combustion. Flash Point C(F): > 250(482) (ASTM D-92). Flammable Limits (approx.% vol.in air) - LEL: 0.9%, UEL: 7.0%

Handling and Storage

<p>Accidental Release /Spill Measures to Take NOTIFICATION PROCEDURES: Report spills as required to appropriate authorities. U.S. Regulations require immediate reporting of all oil spills that could reach any waterway, including wetlands and intermittent dry creeks. Report all oil spills to the National Response Center (U.S. Coast Guard) at (800)424-8802. In case of accident or road spill, notify CHEMTREC at (800)424-9300. Note: This product does NOT contain any hazardous substances reportable under CERCLA.</p> <p>PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: LAND SPILL: Shut off source taking normal safety precautions. Take measures to minimize the effects on ground water. Recover by pumping or contain spilled material with sand or other suitable absorbent and remove mechanically into containers.</p> <p>WATER SPILL: Confine the spill immediately with booms. Warn other ships in the vicinity. Notify port and other relevant authorities. Remove from the surface by skimming or with suitable absorbents. If permitted by regulatory authorities the use of suitable dispersants should be considered where recommended in local oil spill procedures.</p> <p>ENVIRONMENTAL PRECAUTIONS: Prevent material from entering sewers, water sources or low lying areas; advise the relevant authorities if it has, or if it contaminates soil/vegetation.</p>	<p>Precautions for Storage Keep containers closed when not in use. Do not store in open or unlabelled containers. Store away from strong oxidizing agents and combustible materials. Do not store near heat, sparks, flame or strong oxidants.</p> <p>SPECIAL PRECAUTIONS: Prevent small spills and leakages to avoid slip hazard.</p> <p>EMPTY CONTAINER WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous.</p> <p>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.</p> <p>Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.</p>	<p>Handling This material is not intended for use in air compressors for breathing applications. High pressure injection under the skin may occur due to the rupture of pressurized lines. Always seek medical attention. No special precautions are necessary beyond normal good hygiene practices.</p>
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Disposal/Transportation

<p>Disposal Method WASTE DISPOSAL: EVEN THOUGH THIS PRODUCT IS READILY BIODEGRADABLE, IT MUST NOT BE INDISCRIMINATELY DISCARDED INTO THE ENVIRONMENT. This product is suitable for burning in an enclosed, controlled burner for fuel value and for recycling at an approved facility. In addition, it can be disposed of at an approved waste disposal facility. Land farming and processing through sewage treatment facilities may be available disposal options but necessary approvals must first be obtained from appropriate regulatory authorities. Specific characteristics of the waste at the time of disposal may affect the availability of the above options. RCRA INFORMATION: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity. The unused product is not formulated with substances covered by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.</p>	<p>Transportation USA DOT: NOT REGULATED BY USA DOT. RID/ADR: NOT REGULATED BY RID/ADR. IMO: NOT REGULATED BY IMO. IATA: NOT REGULATED BY IATA. STATIC ACCUMULATOR (50 picosiemens or less): YES</p>
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Regulations

US OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this product is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

EU Labeling: Product is not dangerous as defined by the European Union Dangerous Substances/Preparations Directives. EU labeling not required.

Governmental Inventory Status: All components comply with TSCA, EINECS/ELINCS, and METI.

U.S. Superfund Amendments and Reauthorization Act (SARA) Title III:

This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.

The following product ingredients are cited on the lists below: CHEMICAL NAME CAS NUMBER LIST CITATIONS

*** NO REPORTABLE INGREDIENTS ***

--- REGULATORY LISTS SEARCHED ---

1=ACGIH ALL 6=IARC 11=TSCA 4 16=CA P65 CARC 21=LA RTK

2=ACGIH A1 7=IARC 2A 12=TSCA 5a2 17=CA P65 REPRO 22=MI 293

3=ACGIH A2 8=IARC 2B 13=TSCA 5e 18=CA RTK 23=MN RTK

4=NTP CARC 9=OSHA CARC 14=TSCA 6 19=FL RTK 24=NJ RTK

5=NTP SUS 10=OSHA Z 15=TSCA 12b 20=IL RTK 25=PA RTK

26=RI RTK

Code key: CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

Toxicology Information

---ACUTE TOXICOLOGY---

ORAL TOXICITY (RATS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.

DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.

INHALATION TOXICITY (RATS): Practically non-toxic (LC50: greater than 5 mg/l). ---Based on testing of similar products and/or the components.

EYE IRRITATION (RABBITS): Practically non-irritating. (Draize score: greater than 6 but 15 or less). ---Based on testing of similar products and/or the components.

SKIN IRRITATION (RABBITS): Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). ---Based on testing of similar products and/or the components.

Ecological Information

ENVIRONMENTAL FATE AND EFFECTS: This product meets OECD ready biodegradability criteria and is essentially nontoxic (LC50 to rainbow trout greater than 5,000 ppm). Small spills of unused product on the ground will be readily biodegraded by naturally occurring soil organisms when exposed to air.

Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. Information provided on this MSDS reflects intended use. This product should not be used for other applications. In any case, the following advice should be considered:

INDUSTRIAL LABEL

Under normal conditions of intended use, this product does not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation. Always observe good hygiene measures. First Aid: Wash skin with soap and water. Flush eyes with water. If overcome by fumes or vapor, remove to fresh air. If ingested do not induce vomiting. If symptoms persist seek medical assistance. Read and understand the MSDS before using this product.