The Toro Company **Emergency:** 800-424-9300

8111 Lyndale Avenue South

**Bloomington, MN** Information: 952-888-8801

55420

#### **SECTION 1** CHEMICAL PRODUCT IDENTIFICATION

**Toro 2 Stroke Engine Oil** Product: Synonyms/Other: Toro 2T, Toro 2 Cycle Oil

MSDS Code: 10695

**Product Type:** 2 cycle engine lubricant.

06/28/2012 **Preparation Date:** 

#### COMPOSITION INFORMATION **SECTION 2**

**INGREDIENTS** CAS# % **OSHA OSHA** ACGIH SKIN **TWA TWA** STEL Hydrotreated light distillate 64742-47-8 Not defined Not defined 20-30 NO Not defined Not defined Mixture

Proprietary additives Comments:

TWA - Time Weighted Average is the employee's average airborne exposure in any 8-hour work shift of a 40-hour work week which shall not be exceeded.

STEL - Short Term Exposure Limit is the employee's 15-minute time weighted average exposure which shall not be exceeded at any time during a work day unless another time limit is specified.

#### **SECTION 3 HAZARDOUS IDENTIFICATION**

**WARNING:** - MAY CAUSE EYE IRRITATION

- MAY CAUSE SKIN IRRITATION

Eye contact: Direct contact may cause irritation, redness, tearing and blurred vision.

Skin contact: Avoid prolonged skin contact. This product contains materials that may cause

skin irritation. Prolonged or repeated contact may result in dermatitis (dryness,

chapping and reddening of skin).

Negligible hazard unless material is strongly heated. Inhalation:

Ingestion: Do not ingest. Product is expected to be relatively non-toxic unless lung

aspiration occurs. Aspiration hazard is not expected due to material's heavy viscosity. Should aspiration occur, may lead to chemical pneumonitis which is characterized by pulmonary edema and hemorrhage and may be fatal. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking and gagging are often noted at the time of aspiration. This product has laxative properties and may result in

abdominal cramps and diarrhea.

Other: Not applicable.

#### FIRST AID MEASURES **SECTION 4**

Eye contact: Check for and remove contact lenses. Flush eyes with cool, clean, low-

pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. If irritation persists seek medical

attention.

Skin contact: Remove contaminated clothing. Wash contaminated area thoroughly with soap

and water. If redness or irritation occurs, seek medical attention. Wash

contaminated clothing before reuse.

Inhalation: If overcome by inhalation of hot vapors, remove to fresh air. Use oxygen if

> there is difficulty breathing or artificial respiration if breathing has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.

Do not induce vomiting unless directed by a physician. During vomiting there is Ingestion:

a danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs keep head below hips to prevent aspiration and monitor for breathing difficulty. Gastric lavage should be performed only by qualified medical personnel. Keep affected person warm

and at rest. Seek immediate medical attention.

Other: Not applicable.

### **SECTION 5**

### **FIRE FIGHTING MEASURES**

Flash point: 80℃ (Cleveland Open Cup)

Flammable limits: Not determined.

Extinguishing media: Use water spray, dry chemical, alcohol foam, all purpose AFFF or carbon

dioxide to extinguish fire.

Special firefighting procedures:

Evacuate area and fight fire from a safe distance. If leak or spill has not ignited, ventilate area and use water spray to disperse gas or vapor and to protect

personnel attempting to stop a leak.

Use water spray to cool adjacent structures and to protect personnel. Shut off source of flow if possible (safely). Stay away from storage tank ends. Withdraw immediately in case of rising sound from venting safety device or any

discoloration of storage tank due to fire.

Fire fighters must wear MSHA/NIOSH approved positive pressure breathing

apparatus (SCBA) with full face mask and full protective equipment.

Unusual fire & explosion hazards:

Dense smoke may be generated while burning. Toxic fumes, gases or vapors may evolve on burning. High temperatures may create heavy flammable

vapors that may settle along ground level and low spots to create an invisible

fire hazard.

Byproducts of combustion:

Smoke, carbon monoxide and dioxide, and other aldehydes of incomplete

combustion. Oxides of carbon, nitrogen, and sulfur; reactive hydrocarbons and

irritating vapors.

Autoignition

temperature: Not determined.

**Explosion data:** Not determined. Care should always be exercised in dust/mist areas. **Other:** When tested via ASTM D4206 this product does not sustain combustion.

### **SECTION 6**

### **ACCIDENTAL RELEASE MEASURES**

Spill control procedures (land):

Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames, heaters, etc.). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Large spill, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers for disposal. If a large spill occurs notify appropriate authorities. In case of road spill or accident contact Chem-Trec

(800-424-9300).

Spill control

procedures (water): Try to contain large spills with floating booms to prevent spill from spreading.

Remove from surface by skimming or with suitable adsorbents. If a large spill occurs notify appropriate authorities (normally the National Response Center or

Coast Guard at 800-424-8802).

Waste disposal method:

Most oil based products are incinerated, land-filled or reclaimed. All disposals must comply with federal, state, and local regulations. The material, if spilled or

discarded may be a regulated waste. Refer to state and local regulations. Department of Transportation (DOT) regulations may apply for transporting this

material when spilled. See Section 14.

Other: CAUTION - If spilled material is cleaned up using a regulated solvent, the

resulting waste mixture will be regulated.

**SECTION 7** HANDLING AND STORAGE

Handling procedures: Keep containers closed when not in use. Do not transfer to unmarked

containers. Fire extinguishers should be kept readily available. See NFPA 30 and OSHA 1910.106 -- Flammable and Combustible Liquids. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld, or use for any other purposes. Return drums to

reclamation centers for proper cleaning and reuse.

Storage procedures: Store containers away from heat, sparks, open flame, or oxidizing materials.

Additional information: No additional information.

#### **EXPOSURE CONTROLS / PERSONAL PROTECTION SECTION 8**

Personal protection: Applicable mainly to persons in repeated contact situations such as packaging

of product, service/maintenance, and cleanup/spill control personnel.

Respiratory protection: None required if airborne concentrations are maintained below threshold limits

listed on page one. Otherwise a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. Where misting may occur, wear an MSHA/NIOSH approved (or equivalent) half-mask form

dust/mist air purifying respirator.

Eye protection is not required if material is used for the intended purpose. If Eye protection:

material is handled such that it could be splashed into the eyes - or there is any concern, wear safety glasses with side shields or vented/splash proof goggles

(ANSI Z87.1 or approved equivalent).

Hand protection: Impervious gloves such as neoprene or nitrile rubber to avoid skin sensitization

and absorption.

Other protection: Use of an apron and overboots of chemically impervious materials such as

neoprene or nitrile rubber is recommended to avoid skin sensitization and absorption. Launder soiled clothes. Properly dispose of contaminated leather

articles and other materials which cannot be decontaminated.

Local control

measures: Use adequate ventilation when working with material in an enclosed area.

Mechanical methods such as fume hoods or area fans may be used to reduce localized vapor/mist areas. If vapor or mist is generated when the material handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specifed exposure. Eyewash stations and showers should be available in areas where this material

is used and stored.

Other: Consumption of food and drink should be avoided in work areas where product

is present. Always wash hands and face with soap and water before eating,

drinking or smoking.

#### **SECTION 9** PHYSICAL AND CHEMICAL PROPERTIES

Vapor pressure: Not determined.

Specific gravity: 0.8550 at 15.6℃ (60.0°F).

Solubility: Negligible in water, miscible in most petroleum solvents.

Percent volatile: Not determined.

Vapor density (air=1): >1

**Evaporation rate** 

Not determined.

(n-Butyl Acetate=1): Odor: Mild. oilv odor. Appearance: Blue liquid

Viscosity: 6.5 cSt at 100℃ (212年).

**Boiling point:** Not determined. Pour/Freeze point: Not determined. Other: Not applicable.

#### **SECTION 10** STABILITY AND REACTIVITY

Stability: Material is stable at room temperatures and pressure. Conditions to avoid: Avoid high temperatures and product contamination.

Incompatibility with

other materials: Decomposition

Avoid contact with acids and oxidizing materials.

**products:** Smoke, carbon monoxide and dioxide, and other aldehydes of incomplete

combustion. Oxides of carbon, nitrogen and sulfur; reactive hydrocarbons and

irritating vapors.

Hazardous

**polymerization:** Will not occur. **Other:** Not applicable.

### SECTION 11 TOXICOLOGICAL INFORMATION

Oral toxicity: Not determined. Dermal toxicity: Not determined.

**Inhalation toxicity:** On rare occasions, prolonged and repeated exposure to oil mist poses a risk of

pulmonary disease such as chronic lung inflammation. This condition is usually asymptotic as a result of repeated small aspirations. Shortness of breath and cough are the most common symptoms. Based on data from similar materials.

Dermal sensitization: Prolonged or repeated contact may make skin more sensitive to other skin

sensitizers. Based on data from similar materials.

Chronic toxicity: Not determined.
Carcinogenicity: Not determined.
Mutagenicity: Not determined.
Reproductive toxicity: Not determined.

Other: These products contain petroleum base oils which may be refined by various

processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils require a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to

humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

### SECTION 12 ECOLOGICAL INFORMATION

Environmental toxicity: Not determined. However, this material may be toxic to aquatic organisms and

should be kept out of sewage and drainage systems and all bodies of water.

Environmental fate: Not determined. Other: Not applicable.

### SECTION 13 DISPOSAL CONSIDERATIONS

Waste disposal: Under RCRA it is the responsibility of the user of the product to determine at the

time of disposal whether the product meets RCRA criteria for hazardous waste. This product unadulterated by other materials may be classified as a non-regulated waste in some areas - but still needs to be disposed of at approved facilities. Waste management should be in full compliance with federal, state,

and local laws.

Disposal consideration: Most used and non-use oils and solvents are incinerated by licensed burner

facilities for heat value, or reclaimed by oil recycling services. Look in a local telephone directory or internet for headings under, 'Waste', 'Waste Services', 'Waste Disposal' for companies licensed to handle such material. Additional information can be obtained from local EPA, DNR, Sewer and Land-Fill sites. Unused, packaged fluids may be donated to other companies or charities (fluids

MUST be unused).

Other: The transportation, storage, treatment and disposal of RCRA waste material

must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Disposal can only occur in properly permitted facilities. Check state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Disposal of

this material must be conducted in compliance with all federal, state, and local regulations.

### SECTION 14 TRANSPORT INFORMATION

U.S. DOT identification: Not DOT Regulated Not regulated Not regulated Not regulated

Other: This product is not DOT regulated when shipped by ground in containers of <

119 gallons. Consult CFR-49 for more information

### SECTION 15 REGULATORY INFORMATION

Clean water act/oil

pollution act: Under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution

Control Act of 1990, this material is considered an oil. Any spill or discharges that produce a visible sheen or film on surface of water, or in waterways, ditches, or sewers leading to surface water must be reported. Contact the

National Response Center at 800-424-8802.

**TSCA:** All components of this material are listed in the U.S. TSCA Inventory.

Other TSCA: Not applicable.

SARA Title III: Section 302/304 extremely hazardous substances:

There are no components present at or greater than the de minimis

concentration

Section 311, 312 hazard categorization:

Acute (immediate health effects): NO
Chronic (delayed health effects): NO
Fire (hazard): NO
Reactivity (hazard): NO
Pressure (sudden release hazard): NO

Section 313 toxic chemicals:

There are no components present at or greater than the de minimis

concentration.

**CERCLA:** For stationary/moving sources – reportable quantity (due to):

Exempt due to petroleum exclusion.

Other: A release of this product, as supplied, is exempt from reporting under the

Comprehensive Environmental Response Compensation and Liability Act (CERCLA) by the petroleum exclusion. However, releases may be reportable to the Nation Response Center under the Clean Water Act, 33 U.S.C. 1321(b)(3) and (5) - see head of Section 15. Failure to report may result in

substantial civil and criminal penalties.

Recommend contacting the local authorities in the event of any type of spill to

determine local reporting requirements and also to aid in the cleanup.

### SECTION 16 OTHER INFORMATION

	NFPA 704	KEY
HEALTH:	1	0 = Minimal
FIRE:	2	1 = Slight
REACTIVITY:	0	2 = Moderate
SPECIFIC HAZARD:	NONE	3 = Serious
PROTECTION INDEX:	N/A	4 = Severe

This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used. Toro must rely on information provided by those materials manufacturers or distributors.

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