

Safety Data Sheet

Issue date: 02/18/2016

v 1

Last Revision Date: 02/17/2016

1 Identification

- **Product identifier**

- **Trade name: TerraClean Extended Interval Engine Oil Cleaner**

- **Part number:** 206230

- **Application of the substance / the mixture** Engine oil flush

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

- Terraclean, division of, CPS Products Canada Ltd.

- 1324 Blundell Road

- Mississauga, ON, L4Y 1M5

- Canada

- Phone: (905) 615-8620

- email of person responsible: customerservice@terraclean.net

- **Emergency telephone number:**

- CHEMTREC International +1 (703) 527-3887 (outside the US), 1-800-424-9300 (in the US) 24 hr

2 Hazard(s) identification

- **Classification of the substance or mixture**

Flam. Liq. 3 H226 Flammable liquid and vapor.

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

- **Label elements**

- **GHS label elements**

- The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02 GHS07 GHS09

- **Signal word** Warning

- **Hazard-determining components of labeling:**

- 2-butoxyethanol

- (R)-p-mentha-1,8-diene

- **Hazard statements**

- Flammable liquid and vapor.

- Harmful if swallowed.

- Harmful in contact with skin.

- Harmful if inhaled.

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Causes skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.
 Very toxic to aquatic life.
 Very toxic to aquatic life with long lasting effects.

- **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Wear protective gloves/protective clothing/eye protection/face protection.
 Avoid release to the environment.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Call a POISON CENTER/doctor if you feel unwell.
 If skin irritation or rash occurs: Get medical advice/attention.
 IF ON SKIN: Wash with plenty of water.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:** For Professional Use Only

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture: consisting of the following hazardous components.

- **Chemical components:**

5989-27-5	(R)-p-mentha-1,8-diene	25-50%
111-76-2	2-butoxyethanol	25-50%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- **Description of first aid measures**

- **After inhalation:**

Supply fresh air and to be sure call for a doctor.
 In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:**

Wash with plenty of soap and water. Remove contaminated clothing. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse.

- **After eye contact:**

Rinse cautiously with water. Remove contact lenses, if present and easy to do. Get medical attention if eye irritation develops or persists.

- **After swallowing:** Do not induce vomiting; immediately call for medical help.

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· **Information for doctor:**· **Most important symptoms and effects, both acute and delayed**

May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. Repeated exposure to this material can result in absorption through skin causing significant health hazard.

Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Harmful if swallowed. May be fatal if swallowed and enters airways. Swallowing a small quantity of this material will result in serious health hazard.

May cause respiratory tract irritation.

· **Indication of any immediate medical attention and special treatment needed**

Medical supervision for at least 48 hours.

5 Fire-fighting measures· **Extinguishing media**

· **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.

· **For safety reasons unsuitable extinguishing agents:** Water

· **Special hazards arising from the substance or mixture** See section 10 for additional information.

· **Advice for firefighters**· **Protective equipment:**

Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Do not use a water jet.

6 Accidental release measures· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

Take precautions to avoid release to the environment. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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7 Handling and storage

- **Handling:**
 - **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
 - **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:**
See section 10 for incompatible materials.
 - **Information about storage in one common storage facility:** Not required.
 - **Further information about storage conditions:**
Keep receptacle tightly sealed.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection· **Control parameters**· **Components with limit values that require monitoring at the workplace:****111-76-2 2-butoxyethanol (25-50%)**

PEL (USA)	TWA: 240 mg/m ³ , 50 ppm Skin
REL (USA)	TWA: 24 mg/m ³ , 5 ppm Skin
TLV (USA)	TWA: 97 mg/m ³ , 20 ppm BEI
EL (Canada)	TWA: 20 ppm
EV (Canada)	TWA: 20 ppm Skin

· **Ingredients with biological limit values:****111-76-2 2-butoxyethanol (25-50%)**

BEI (USA)	200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid with hydrolysis
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- **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

- **Personal protective equipment:**
 - **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.

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Avoid contact with the eyes and skin.

- **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:**



Chemical resistant protective gloves

- **Eye protection:**



Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.

- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

- **Form:** Fluid
- **Color:** Amber colored

- **Odor:** Citrus
- **Odor threshold:** Not determined.

- **pH-value at 20 °C:** 4

- **Change in condition**

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Undetermined.

- **Flash point:** 53 °C

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:**

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not selfigniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits:**

- **Lower:** 0.7 Vol %
- **Upper:** 10.6 Vol %

- **Vapor pressure at 20 °C:** 2.3 hPa

- **Density at 20 °C:** 0.876 g/cm³
- **Relative density:** Not determined.

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· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic at 40 °C:	1.77 mm ² /s
· Solvent content:	
· Organic solvents:	60.0 %
· VOC content:	60.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
 - **Thermal decomposition / conditions to be avoided:**
Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Heat, open flames, sparks.
- **Incompatible materials:** Strong Oxidizers
- **Hazardous decomposition products:** May include, and are not limited to: oxides of carbon.

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimates)		
Oral	LD50	1567 mg/kg (rat)
Dermal	LD50	1333 mg/kg (rab)
Inhalative	LC50/4 h (vapor)	13 mg/L (rat)
5989-27-5 (R)-p-mentha-1,8-diene		
Oral	LD50	4400 mg/kg (rat)
Dermal	LD50	>5 g/Kg (rabbit)
111-76-2 2-butoxyethanol		
Oral	LD50	470 mg/kg (rat)
Dermal	LD50	400 mg/kg (rab)
Inhalative	LC50/4 h (vapor)	3.9 mg/L (rat)

- **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.

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- **on the eye:** Irritating effect.
- **Ingestion:**
Harmful if swallowed. May be fatal if swallowed and enters airways. Swallowing a small quantity of this material will result in serious health hazard.
- **Sensitization:**
May produce an allergic reaction.
Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
5989-27-5	(R)-p-mentha-1,8-diene	3
111-76-2	2-butoxyethanol	3

· NTP (National Toxicology Program)		
None of the ingredients is listed.		

· OSHA-Ca (Occupational Safety & Health Administration)		
None of the ingredients is listed.		

12 Ecological information· **Toxicity**

· Aquatic toxicity:	
5989-27-5 (R)-p-mentha-1,8-diene	
LC50 (96 h)	0.619-0.796 mg/L (Pimephales promelas)
111-76-2 2-butoxyethanol	
EC50 (48 h)	>1000 mg/L (daphnia)
LC50 (96 h) (static)	1490 mg/L (Lepomis macrochirus)

- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
 - **Remark:** Very toxic for fish
- **Additional ecological information:**
 - **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

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· **Other adverse effects** Avoid release to the environment.

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13 Disposal considerations· **Waste treatment methods**· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information· **UN-Number**

· DOT, IMDG, IATA

UN1993

· **UN proper shipping name**

· DOT

Flammable liquids, toxic, n.o.s. (Dipentene, 2-butoxyethanol)

· IMDG

FLAMMABLE LIQUID, N.O.S. (DIPENTENE, 2-butoxyethanol), MARINE POLLUTANT

· IATA

FLAMMABLE LIQUID, N.O.S. (DIPENTENE, 2-butoxyethanol)

· **Transport hazard class(es)**

· DOT

· **Class**

3 Flammable liquids

· **Label**

3

· **IMDG, IATA**· **Class**

3 Flammable liquids

· **Label**

3

· **Packing group**

· DOT, IMDG, IATA

III

· **Environmental hazards:**

Product contains environmentally hazardous substances:
(R)-p-mentha-1,8-diene

· **Marine pollutant:**

Yes

· **Special precautions for user**

Warning: Flammable liquids

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· Danger code (Kemler):	30
· EMS Number:	F-E,S-D
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1992 FLAMMABLE LIQUIDS, TOXIC, N.O.S. (DIPENTENE, 2-BUTOXYETHANOL), 3 (6.1), III

15 Regulatory information· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· Sara

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

111-76-2 | 2-butoxyethanol

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**· **EPA (Environmental Protection Agency)**

111-76-2 | 2-butoxyethanol

NL

· **TLV (Threshold Limit Value established by ACGIH)**

111-76-2 | 2-butoxyethanol

A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

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· **Canadian substance listings:**· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

All ingredients are listed.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Contact:** Engineering Department· **Issue Date** Feb 17, 2016 v 1.0 original release· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

NA