

Safety data sheet
according to Regulation (EU) No. 453/2010

Issue date: 19.08.2015

Version 1

Revision: 19.08.2015

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
 - **Product name: TerraDiesel Fuel Treatment**
 - **Part number:** 201245, 201248
 - **Application of the substance / the mixture** diesel fuel additive
- **1.3 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
- **1.4 Emergency telephone number:** CHEMTREC International +1 (703) 527-3887 24 hr

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Regulation (EC) No 1272/2008**
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. 2 H319 Causes serious eye irritation.
- **2.2 Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
 - **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**
2-butoxyethanol
2-ethylhexan-1-ol
- **Hazard statements**
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
- **Precautionary statements**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P312 Call a POISON CENTER/doctor if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

GB

Safety data sheet
according to Regulation (EU) No. 453/2010

Issue date: 19.08.2015

Version 1

Revision: 19.08.2015

Product name: TerraDiesel Fuel Treatment

(Contd. of page 1)

- **2.3 Other hazards**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

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

· Dangerous components:		
CAS: 111-76-2 EINECS: 203-905-0	2-butoxyethanol Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	50-100%
CAS: 104-76-7 EINECS: 203-234-3	2-ethylhexan-1-ol Acute Tox. 4, H312; Skin Irrit. 2, H315; Eye Irrit. 2, H319	1-≤2.5%
CAS: 112-80-1 EINECS: 204-007-1	oleic acid, pure Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	1-≤2.5%
CAS: 27247-96-7 EINECS: 248-363-6	2-ethylhexyl nitrate Aquatic Chronic 2, H411; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	0.1-≤2.5%

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

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
 - **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
 - **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
 - **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. Get immediate medical attention.
- **4.2 Most important symptoms and effects, both acute and delayed**
Headache
Unconsciousness
Nausea
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.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

GB

(Contd. on page 3)

Safety data sheet
according to Regulation (EU) No. 453/2010

Issue date: 19.08.2015

Version 1

Revision: 19.08.2015

Product name: TerraDiesel Fuel Treatment

(Contd. of page 2)

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
 - **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
See section 10 for additional information.
- **5.3 Advice for firefighters**
 - **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 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.
- **6.4 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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
Personal protective equipment must be worn. Avoid contact with skin, eyes or clothing.
 - **Information about fire - and explosion protection:**
Keep away from ignition sources and high temperature materials.
- **7.2 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:**
Store at temperatures not exceeding 49 °C/120°F.
 - **Further information about storage conditions:**
Keep container tightly sealed.
Keep from freezing.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

(Contd. on page 4)

Safety data sheet
according to Regulation (EU) No. 453/2010

Issue date: 19.08.2015

Version 1

Revision: 19.08.2015

Product name: TerraDiesel Fuel Treatment

(Contd. of page 3)

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

111-76-2 2-butoxyethanol (50-100%)

WEL	Short-term value: 246 mg/m ³ , 50 ppm
	Long-term value: 123 mg/m ³ , 25 ppm Sk, BMGV

· Ingredients with biological limit values:

111-76-2 2-butoxyethanol (50-100%)

BMGV	240 mmol/mol creatinine
	Octanol-Water: urine
	0.1: post shift 7.3: butoxyacetic acid

· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Avoid contact with the eyes and skin.

· Respiratory protection:

Not necessary if room is well-ventilated.
Use suitable respiratory protective device only when aerosol or mist is formed.

· Protection of hands:



Chemical resistant protective gloves (EN 374)

· Eye protection:



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

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:	Liquid
· Colour:	Amber coloured
· Odour:	Sweetish
· Odour threshold:	Not determined.

· **pH-value:** Not determined.

· Change in condition

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	171 °C

· **Flash point:** 63 °C

(Contd. on page 5)

Safety data sheet
according to Regulation (EU) No. 453/2010

Issue date: 19.08.2015

Version 1

Revision: 19.08.2015

Product name: TerraDiesel Fuel Treatment

(Contd. of page 4)

· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	240 °C
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	1.1 Vol %
· Upper:	10.6 Vol %
· Vapour pressure at 20 °C:	1.2 hPa
· Density at 20 °C:	0.899 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· water at 20 °C:	1 g/l
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic:	Not determined.
· Solvent content:	
· Organic solvents:	97.0 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
 - **Acute toxicity**
Harmful if swallowed, in contact with skin or if inhaled.

· **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)		
Oral	LD50	490 mg/kg
Dermal	LD50	418 mg/kg
Inhalative	LC50/4 h	2.31 mg/l

(Contd. on page 6)

Safety data sheet
according to Regulation (EU) No. 453/2010

Issue date: 19.08.2015

Version 1

Revision: 19.08.2015

Product name: TerraDiesel Fuel Treatment

(Contd. of page 5)

111-76-2 2-butoxyethanol

Oral	LD50	470 mg/kg (rat)
Dermal	LD50	400 mg/kg (rab)
Inhalative	LC50/4 h	2.2 mg/l (rat)

104-76-7 2-ethylhexan-1-ol

Oral	LD50	2049 mg/kg (rat)
Dermal	LD50	1970 mg/kg (rabbit)

112-80-1 oleic acid, pure

Oral	LD50	74000 mg/kg (rat)
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27247-96-7 2-ethylhexyl nitrate

Oral	LD50	500 mg/kg (ATE)
Dermal	LD50	1100 mg/kg (ATE)
Inhalative	LC50/4 h	11 mg/l (ATE)

- **Primary irritant effect:**

- **Skin corrosion/irritation**

- Causes skin irritation.

- **Serious eye damage/irritation**

- Causes serious eye irritation.

- **Inhalation:** May cause respiratory tract irritation.

- **Ingestion:** May cause gastrointestinal irritation, nausea, vomiting, diarrhea.

- **Respiratory or skin sensitisation**

- Based on available data, the classification criteria are not met.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

- **Carcinogenicity** Based on available data, the classification criteria are not met.

- **Reproductive toxicity** Based on available data, the classification criteria are not met.

- **STOT-single exposure** Based on available data, the classification criteria are not met.

- **STOT-repeated exposure** Based on available data, the classification criteria are not met.

- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

111-76-2 2-butoxyethanol

EC50 (48 h)	>1000 mg/L (daphnia)
LC50 (96 h) (static)	1490 mg/l (Lepomis macrochirus)

112-80-1 oleic acid, pure

LC50 (96 h)	205 mg/l (fish)
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- **12.2 Persistence and degradability** No further relevant information available.

- **12.3 Bioaccumulative potential**

112-80-1 oleic acid, pure

Bioaccumulation	LogPow 7.73 (-) (potential high)
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- **12.4 Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

- Not known to be hazardous to water.

(Contd. on page 7)

Safety data sheet
according to Regulation (EU) No. 453/2010

Issue date: 19.08.2015

Version 1

Revision: 19.08.2015

Product name: TerraDiesel Fuel Treatment

(Contd. of page 6)



Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **12.5 Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
 - **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
 - **Uncleaned packaging:**
 - **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|--|---|
| <ul style="list-style-type: none"> · 14.1 UN-Number · ADR, IMDG, IATA | UN2810 |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG, IATA | UN2810 TOXIC LIQUID, ORGANIC, N.O.S. (2-butoxyethanol)
TOXIC LIQUID, ORGANIC, N.O.S. (2-butoxyethanol) |
| <ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR | <div style="text-align: center;">  </div> <ul style="list-style-type: none"> · Class · Label |
| <ul style="list-style-type: none"> · IMDG, IATA | <div style="text-align: center;">  </div> <ul style="list-style-type: none"> · Class · Label |
| <ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA | 6.1 (T1) Toxic substances.
6.1

III |
| <ul style="list-style-type: none"> · 14.5 Environmental hazards: | Not applicable. |
| <ul style="list-style-type: none"> · 14.6 Special precautions for user · Danger code (Kemler): | Warning: Toxic substances.
60 |

(Contd. on page 8)

Safety data sheet
according to Regulation (EU) No. 453/2010

Issue date: 19.08.2015

Version 1

Revision: 19.08.2015

Product name: TerraDiesel Fuel Treatment

(Contd. of page 7)

· EMS Number:	F-A,S-A
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	

· ADR	
· 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
· Transport category	2
· Tunnel restriction code	E

· 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 2810 TOXIC LIQUID, ORGANIC, N.O.S. (2-BUTOXYETHANOL), 6.1, III

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
No REACH Annex XVII restrictions
Contains no REACH candidate substance
 - **Directive 2012/18/EU**
 - **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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.

- **Issue Date:** August 19, 2015
 - **Relevant phrases**
 - H302 Harmful if swallowed.
 - H312 Harmful in contact with skin.
 - H315 Causes skin irritation.
 - H319 Causes serious eye irritation.
 - H332 Harmful if inhaled.
 - H335 May cause respiratory irritation.
 - H411 Toxic to aquatic life with long lasting effects.
- **Contact:** Engineering Department
 - **Revision Changes:** v 1.0 - original SDS release (August 19, 2015)

(Contd. on page 9)

Safety data sheet
according to Regulation (EU) No. 453/2010

Issue date: 19.08.2015

Version 1

Revision: 19.08.2015

Product name: TerraDiesel Fuel Treatment

(Contd. of page 8)

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity, Hazard Category 4

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

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

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

GB