

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

Issue date: 19.10.2015

Version 1

Last Revision: 19.10.2015

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

- **1.1 Product identifier**
 - **Product name: TerraDiesel C-Shot Diesel Fuel Supplement**
 - **Part number:** 201281
 - **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.
Carc. 2	H351	Suspected of causing cancer.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.

- **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 GHS08 GHS09

- **Signal word** Danger
- **Hazard-determining components of labelling:**
 - 2-ethylhexyl nitrate
 - Solvent naphtha (petroleum), heavy arom.
 - Fuels, diesel
 - 2-butoxyethanol
- **Hazard statements**

H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H304	May be fatal if swallowed and enters airways.
H411	Toxic to aquatic life with long lasting effects.

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· **Precautionary statements**

- P201 Obtain special instructions before use.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P280 Wear protective gloves / eye protection.
 P273 Avoid release to the environment.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P331 Do NOT induce vomiting.
 P405 Store locked up.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

EUH044 Risk of explosion if heated under confinement.

· **Labelling of packages where the contents do not exceed 125 ml**

· **Hazard pictograms**



GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**

2-ethylhexyl nitrate
 Solvent naphtha (petroleum), heavy arom.
 Fuels, diesel
 2-butoxyethanol

· **Hazard statements**

H351 Suspected of causing cancer.
 H304 May be fatal if swallowed and enters airways.

· **Precautionary statements**

- P201 Obtain special instructions before use.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P280 Wear protective gloves / eye protection.
 P273 Avoid release to the environment.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P331 Do NOT induce vomiting.
 P405 Store locked up.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

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

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

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

· Dangerous components:

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	25-50%
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	10-<25%
CAS: 64742-94-5 EINECS: 265-198-5	Solvent naphtha (petroleum), heavy arom. Asp. Tox. 1, H304	10-<25%
CAS: 68334-30-5 EINECS: 269-822-7	Fuels, diesel Carc. 2, H351	2.5-<10%
CAS: 91-20-3 EINECS: 202-049-5	naphthalene Carc. 2, H351; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302	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:

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation continues, consult a doctor.

· 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 See section 11.

· **Information for doctor:** Treat Symptomatically

4.3 Indication of any immediate medical attention and special treatment needed

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

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

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.

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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:**

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.

· **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.

· **Information about fire - and explosion protection:** Protect from heat.

· **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:** Not required.

· **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

· **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.

· **8.1 Control parameters**

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

111-76-2 2-butoxyethanol (10-<20%)

WEL Short-term value: 246 mg/m³, 50 ppm

Long-term value: 123 mg/m³, 25 ppm

Sk, BMGV

· **Ingredients with biological limit values:**

111-76-2 2-butoxyethanol (10-<20%)

BMGV 240 mmol/mol creatinine

Octanol-Water: urine

0.1: post shift

7.3: butoxyacetic acid

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- **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:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
 - **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:** Dark
- **Odour:** Mild
- **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· Change in condition

- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** 171 °C

· **Flash point:** 72 °C

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

· **Ignition temperature:** 215 °C

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Not determined.

· Explosion limits:

- **Lower:** 1.1 Vol %
- **Upper:** 10.6 Vol %

· **Vapour pressure at 20 °C:** 1.2 hPa

· **Density at 20 °C:** 0.96 g/cm³
· **Relative density:** Not determined.

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· Vapour 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:	4.2 mm ² /s
· Solvent content:	
· Organic solvents:	15.0 %
· 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:** Strong Oxidizers
- **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:**

Oral	LD50	798 mg/kg
Dermal	LD50	1270 mg/kg
Inhalative	LC50/4 h (vapor)	12.6 mg/L

27247-96-7 2-ethylhexyl nitrate

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

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)

91-20-3 naphthalene

Oral	LD50	490 mg/kg (rat)
Dermal	LD50	5000 mg/kg (rat)

- **Primary irritant effect:**
 - **Skin corrosion/irritation**
Causes skin irritation.

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- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Inhalation:** May cause respiratory tract irritation.
- **Ingestion:** May be fatal if swallowed and enter airways.
- **Respiratory or skin sensitisation**
Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
 - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
 - **Carcinogenicity**
Suspected of causing cancer.
 - **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**
May be fatal if swallowed and enters airways.

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)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
 - **Ecotoxicological effects:**
 - **Remark:** Toxic for fish
 - **Additional ecological information:**
 - **General notes:**
Water hazard class 2 (German Regulation) (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.
Toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **12.6 Other adverse effects** Avoid release to the environment.

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.

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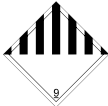

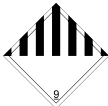

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SECTION 14: Transport information

<ul style="list-style-type: none"> · 14.1 UN-Number · ADR, IMDG, IATA 	UN3082
<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG · IATA 	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate, NAPHTHALENE, CRUDE) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate, NAPHTHALENE, CRUDE), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate, NAPHTHALENE, CRUDE)
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR 	<div style="display: flex; align-items: center; gap: 10px;">   </div> <ul style="list-style-type: none"> · Class · Label
<ul style="list-style-type: none"> · IMDG, IATA 	<div style="display: flex; align-items: center; gap: 10px;">   </div> <ul style="list-style-type: none"> · Class · Label
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	III
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA): 	Product contains environmentally hazardous substances: naphthalene, 2-ethylhexyl nitrate Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
<ul style="list-style-type: none"> · 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: 	Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: · ADR · Limited quantities (LQ) 	5L

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· Transport category	3
· Tunnel restriction code	E
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· 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 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ETHYLHEXYL NITRATE, NAPHTHALENE, CRUDE), 9, 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.
- **Seveso category E2** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

· 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:** October 19, 2015

· **Relevant phrases**

- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H351 Suspected of causing cancer.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.

· **Contact:** Engineering Department

- **Revision Changes:** v 1.0 - original SDS release (October 19, 2015)

· **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
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances

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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
Carc. 2: Carcinogenicity, Hazard Category 2
Asp. Tox. 1: Aspiration hazard, 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
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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