

Safety Data Sheet

Issue date: 02/25/2016

v 2

Last Revision Date: 10/19/2015

1 Identification

- **Product identifier**

- **Trade name: TerraDiesel C-Shot Diesel Fuel Supplement**

- **Part number:** 201281, 201282

- **Application of the substance / the mixture** diesel fuel additive

- **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: customerservice@terraceclean.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

Classified according to the criteria of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), OSHA Hazardous Communication Standard (29 CFR 1910.1200) and the Canadian Controlled Products Regulations.

- **Classification of the substance or mixture**

Flam. Liq. 4 H227 Combustible liquid.

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.

Carc. 2 H351 Suspected of causing cancer.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

Aquatic Acute 2 H401 Toxic to aquatic life.

Aquatic Chronic 2 H411 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**



GHS07 GHS08 GHS09

- **Signal word** Danger

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

- 2-ethylhexyl nitrate

- Solvent naphtha (petroleum), heavy arom.

- Fuels, diesel

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2-butoxyethanol

· **Hazard statements**

Combustible liquid.
 Harmful if swallowed.
 Harmful in contact with skin.
 Harmful if inhaled.
 Causes skin irritation.
 Causes serious eye irritation.
 Suspected of causing cancer.
 May be fatal if swallowed and enters airways.
 Toxic to aquatic life.
 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

Obtain special instructions before use.
 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 Wear protective gloves / eye protection.
 Avoid release to the environment.
 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 IF exposed or concerned: Get medical advice/attention.
 If skin irritation occurs: Get medical advice/attention.
 Do NOT induce vomiting.
 Store locked up.
 Store in a well-ventilated place. Keep cool.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **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:**

27247-96-7	2-ethylhexyl nitrate	25-50%
111-76-2	2-butoxyethanol	10-<25%
64742-94-5	Solvent naphtha (petroleum), heavy arom.	10-<25%
68334-30-5	Fuels, diesel	2.5-<10%
91-20-3	naphthalene	0.1-≤2.5%

· **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. 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.

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- **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; immediately call for medical help.
- **Information for doctor:** Treat Symptomatically
 - **Most important symptoms and effects, both acute and delayed** See section 11.
 - **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.

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:** Mouth respiratory protective device.

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.
- **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.

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:** Protect from heat.

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- **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.
- **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 (10-<20%)**

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

68334-30-5 Fuels, diesel (2.5-<10%)

TLV (USA)	TWA: 100* mg/m ³ as total hydrocarbons; Skin; *inh. fraction + vapor
EL (Canada)	TWA: 100 mg/m ³ vapour and inhalable aerosol; Skin
EV (Canada)	TWA: 100 mg/m ³ as total hydrocarbons, vapour and aerosol, Skin

91-20-3 naphthalene (1-<2.5%)

PEL (USA)	TWA: 50 mg/m ³ , 10 ppm
REL (USA)	STEL: 75 mg/m ³ , 15 ppm TWA: 50 mg/m ³ , 10 ppm
TLV (USA)	TWA: 52 mg/m ³ , 10 ppm Skin; BEI
EL (Canada)	STEL: 15 ppm TWA: 10 ppm Skin; IARC 2B
EV (Canada)	STEL: 78 mg/m ³ , 15 ppm TWA: 52 mg/m ³ , 10 ppm

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Ingredients with biological limit values:**111-76-2 2-butoxyethanol (10-<20%)**

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.
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.

9 Physical and chemical properties**Information on basic physical and chemical properties****General Information****Appearance:**

· Form:	Liquid
· Color:	Dark
· Odor:	Mild
· Odor 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

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· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Not determined.
· Explosion limits:	
· Lower:	1.1 Vol %
· Upper:	10.6 Vol %
· Vapor pressure at 20 °C:	1.2 hPa
· Density at 20 °C:	0.96 g/cm ³
· Relative density	Not determined.
· 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:	4.2 mm ² /s
· Solvent content:	
· Organic solvents:	15.0 %
· VOC content:	15.0 %
· 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	798 mg/kg
Dermal	LD50	1270 mg/kg
Inhalative	LC50/4 h (vapor)	12.6 mg/L

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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 (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:**

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Inhalation:** May cause respiratory tract irritation.
- **Ingestion:** May be fatal if swallowed and enter airways.

- **Sensitization:** No sensitizing effects known.

- **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)**

111-76-2	2-butoxyethanol	3
68334-30-5	Fuels, diesel	2B
91-20-3	naphthalene	2B

- **NTP (National Toxicology Program)**

91-20-3	naphthalene	R
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- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

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.

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- **Ecotoxicological effects:**
 - **Remark:** 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.
 - Toxic for aquatic organisms
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **Other adverse effects** Avoid release to the environment.

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

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> · UN-Number <ul style="list-style-type: none"> · DOT, IMDG, IATA · TDG | <p>UN3082
UN3082</p> |
| <ul style="list-style-type: none"> · UN proper shipping name <ul style="list-style-type: none"> · DOT · TDG · IMDG · IATA | <p>Environmentally hazardous substances, liquid, n.o.s.
Environmentally hazardous substances, liquid, n.o.s.
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)</p> |
| <ul style="list-style-type: none"> · Transport hazard class(es) <ul style="list-style-type: none"> · DOT, IMDG, IATA | <p></p> <ul style="list-style-type: none"> · Class |
| | <p>9 Miscellaneous dangerous substances and articles</p> |

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· Label	9
· TDG	
· Class	9 Miscellaneous dangerous substances and articles
· Label	9
· Packing group	
· DOT, IMDG, IATA	III
· TDG	III
· Environmental hazards:	Product contains environmentally hazardous substances: naphthalene, 2-ethylhexyl nitrate
· Marine pollutant:	Yes
· Special marking (ADR):	Symbol (fish and tree)
· Special precautions for user	Warning: Miscellaneous dangerous substances and articles
· Danger code (Kemler):	90
· EMS Number:	F-A,S-F
· 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
· DOT (Size/package type):	LTD QTY, Consumer Commodity, ORM-D (177 mL/bottle)
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (2-ETHYLHEXYL NITRATE, NAPHTHALENE, CRUDE), 9, 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

91-20-3 naphthalene

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

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

91-20-3 naphthalene

· **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
91-20-3	naphthalene	C, CBD

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

111-76-2	2-butoxyethanol	A3
68334-30-5	Fuels, diesel	A3
91-20-3	naphthalene	A4

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

None of the ingredients is listed.

· **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%)**

111-76-2	2-butoxyethanol
91-20-3	naphthalene

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** Original Release October 19, 2015· **Revision Changes:** Revision Date v 2.0 February 25, 2016· **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

ELINCS: European List of Notified Chemical Substances

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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

Flam. Liq. 4: Flammable liquids, Hazard Category 4

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

Carc. 2: Carcinogenicity, Hazard Category 2

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - AcuteHazard, Category 2

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

NA