

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

Issue date: 08.07.2015

Version 1

Revision: 08.07.2015

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

- **1.1 Product identifier**
 - **Product name: TerraDiesel Fuel Injector Cleaner**
 - **Part number:** 201255, 201256
 - **Application of the substance / the mixture** diesel fuel additive for cleaning
- **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**

Flam. Liq. 3	H226	Flammable liquid and vapour.
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.
Muta. 1B	H340	May cause genetic defects.
Carc. 1B	H350	May cause cancer.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.
Aquatic Chronic 3	H412	Harmful 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**



GHS02 GHS07 GHS08

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

H226	Flammable liquid and vapour.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

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H340 May cause genetic defects.
H350 May cause cancer.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
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.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P308+P313 IF exposed or concerned: 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.
Restricted to professional users.

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: 64742-47-8 EINECS: 265-149-8	Distillates (petroleum), hydrotreated light Flam. Liq. 3, H226; Asp. Tox. 1, H304	25-50%
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	10-<25%
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-<20%
CAS: 64742-94-5 EINECS: 265-198-5	Solvent naphtha (petroleum), heavy arom. Asp. Tox. 1, H304	2.5-<10%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. Flam. Liq. 3, H226; Muta. 1B, H340; Carc. 1B, H350; Asp. Tox. 1, H304	2.5-<10%
CAS: 1330-20-7 EINECS: 215-535-7	xylene Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	1-<2.5%
CAS: 95-63-6 EINECS: 202-436-9	1,2,4-trimethylbenzene Flam. Liq. 3, H226; Aquatic Chronic 2, H411; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	1-<2.5%
CAS: 178535-25-6 EC number: 700-371-5	Benzene, ethylenated, residues, distn. lights Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319	1-<2.5%

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CAS: 100-41-4 EINECS: 202-849-4	ethylbenzene Flam. Liq. 2, H225; Carc. 2, H351; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H332	0.1-<1%
CAS: 102-25-0 EINECS: 203-017-3	1,3,5-triethylbenzene	0.1-<1%

· **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 rinse with water. Immediately remove all 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. Get immediate medical attention.

A person vomiting while laying on their back should be turned onto their side.

· 4.2 Most important symptoms and effects, both acute and delayed

Headache

Dizziness

May cause nose, throat, and lung irritation.

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.

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

Irritating to skin and eyes. Could cause dermatitis. Will cause nausea and vomiting.

· 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.

Treat Symptomatically

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:

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.

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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.
Particular danger of slipping on leaked/spilled product.

- **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.

Do not flush with water or aqueous cleansing agents

- **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**

Open and handle receptacle with care.
Use only in well ventilated areas.
Avoid contact with the eyes and skin.
Avoid contact with clothing.
Avoid splashes or spray in enclosed areas.

- **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.
Keep respiratory protective device available.

- **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.

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· **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/m ³ , 50 ppm Long-term value: 123 mg/m ³ , 25 ppm Sk, BMGV
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1330-20-7 xylene (1-≤2.5%)

WEL	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
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95-63-6 1,2,4-trimethylbenzene (1-<2.5%)

WEL	Long-term value: 125 mg/m ³ , 25 ppm ILV
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· **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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1330-20-7 xylene (1-≤2.5%)

BMGV	650 mmol/mol creatinine Octanol-Water: urine 0.1: post shift 7.3: methyl hippuric 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
- Store protective clothing separately.
- Avoid contact with the skin.
- 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.

· **Body protection:** Protective work clothing

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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:** 43 °C

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

· **Ignition temperature:** 210 °C

· **Decomposition temperature:** Not determined.

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

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

· **Explosion limits:**

· **Lower:** 0.5 Vol %

· **Upper:** 10.6 Vol %

· **Vapour pressure at 20 °C:** 2 hPa

· **Density at 20 °C:** 0.8 g/cm³

· **Relative density** Not determined.

· **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:** Not determined.

· **Solvent content:**

· **Organic solvents:** 24.1 %

· **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.

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- **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:

ATE (Acute Toxicity Estimates)

Oral	LD50	1539 mg/kg
Dermal	LD50	1839 mg/kg
Inhalative	LC50/4 h	11.1 mg/l

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)

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)

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)
Inhalative	LC50/4 h	6700 mg/l (rat)

95-63-6 1,2,4-trimethylbenzene

Oral	LD50	5000 mg/kg (rat)
Inhalative	LC50/4 h	18 mg/l (rat)

178535-25-6 Benzene, ethylenated, residues, distn. lights

Oral	LD50	>2000 mg/kg (rat)
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100-41-4 ethylbenzene

Oral	LD50	3500 mg/kg (rat)
Dermal	LD50	17800 mg/kg (rabbit)
Inhalative	LC50/4 h	17.8 mg/l (rat)

· Primary irritant effect:

· Skin corrosion/irritation

Causes skin irritation.

· Serious eye damage/irritation

Causes serious eye irritation.

· Inhalation:

Do not inhale, can cause respiratory system irritation.

· Ingestion:

May be fatal if swallowed and enter airways.

· Respiratory or skin sensitisation

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

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- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
 - **Germ cell mutagenicity**
May cause genetic defects.
 - **Carcinogenicity**
May cause 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:**
Harmful to aquatic life with long lasting effects.

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:** Harmful to 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.
Harmful to 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.

SECTION 14: Transport information

- **14.1 UN-Number**
 - **ADR, IMDG, IATA** UN1992

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· **14.2 UN proper shipping name**

· ADR

UN1992 FLAMMABLE LIQUID, TOXIC, N.O.S.
(Distillates (petroleum), hydrotreated light, 2-ethylhexyl nitrate)

· IMDG, IATA

FLAMMABLE LIQUID, TOXIC, N.O.S.
(Distillates (petroleum), hydrotreated light, 2-ethylhexyl nitrate)

· **14.3 Transport hazard class(es)**

· ADR



· Class

3 (FT1) Flammable liquids.

· Label

3+6.1

· IMDG



· Class

3 Flammable liquids.

· Label

3/6.1

· IATA



· Class

3 Flammable liquids.

· Label

3 (6.1)

· **14.4 Packing group**

· ADR, IMDG, IATA

III

· **14.5 Environmental hazards:**

· Marine pollutant:

No

· **14.6 Special precautions for user**

· Danger code (Kemler):

Warning: Flammable liquids.

· EMS Number:

36

F-E,S-D

· **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

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· Tunnel restriction code	D/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":	UN1992, FLAMMABLE LIQUID, TOXIC, N.O.S. (Distillates (petroleum), hydrotreated light, 2-ethylhexyl nitrate), 3 (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
- **National regulations:**
 - **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
- **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:** July 8, 2015
- **Relevant phrases**
 - H225 Highly flammable liquid and vapour.
 - H226 Flammable liquid and vapour.
 - 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.
 - H335 May cause respiratory irritation.
 - H340 May cause genetic defects.
 - H350 May cause cancer.
 - H351 Suspected of causing cancer.
 - H373 May cause damage to organs through prolonged or repeated exposure.
 - H411 Toxic to aquatic life with long lasting effects.
- **Contact:** Engineering Department
- **Revision Changes:** v 1.0 - original release (July 8, 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

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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
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. 2: Flammable liquids, Hazard Category 2
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. 2: Serious eye damage/eye irritation, Hazard Category 2
Muta. 1B: Germ cell mutagenicity, Hazard Category 1B
Carc. 1B: Carcinogenicity, Hazard Category 1B
Carc. 2: Carcinogenicity, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Asp. Tox. 1: Aspiration hazard, Hazard Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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