| Issue date: 11/25/2015 | v 2 | Last Revision Date: 06/09/2015 |
|------------------------|-----|--------------------------------|
|------------------------|-----|--------------------------------|

1 Identification

· Product identifier

· Trade name: TerraDiesel EGR System Cleaner

- · Part number: 201279, 201280
- · Application of the substance / the mixture Diesel EGR and Induction System Cleaner

· 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@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

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

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Carc. 2 H351 Suspected of causing cancer.

· Label elements

· GHS label elements

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



GHS07 GHS08

- Signal word Warning
- Hazard statements
- Causes skin irritation.
- Causes serious eye irritation.
- Suspected of causing cancer.
- Precautionary statements
- Obtain special instructions before use.
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Take off contaminated clothing and wash it before reuse.
- If eye irritation persists: Get medical advice/attention.
- IF ON SKIN: Wash with plenty of water.
- Store locked up.
 - Dispose of contents/container in accordance with local/regional/national/international regulations.
- · Additional information: For Professional Use Only

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1-<2% 0.1-<1%

· 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:

1310-73-2 sodium hydroxide

18662-53-8 Nitrilotriacetic acid trisodium salt monohydrate

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

4 First-aid measures

· Description of first aid measures

· After inhalation:

In case of unconsciousness place patient stably in side position for transportation. Supply fresh air; consult doctor in case of complaints.

After skin contact:

Wash with soap and water for 20 minutes or until chemical is removed. Immediately remove all contaminated clothing. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse and discard leather articles saturated with the material.

• 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. Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- Information for doctor: Treat Symptomatically
 - Most important symptoms and effects, both acute and delayed
 - Irritating to skin and eyes. Could cause dermititus. Will cause nausea and vomiting. Irritating to mouth, throat and stomach.
 - Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

· Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture
- See section 10 for additional information.
- · Advice for firefighters
 - Protective equipment:

Recommend wearing self-contained breathing apparatus. Water may cause splattering.

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6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Avoid breathing vapors.
 Personal protective equipment must be worn. Avoid contact with skin, eyes or clothing. Remove persons from danger area.
- Environmental precautions: Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system.
 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). 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

Use good personal hygiene practices

Avoid contact with the eyes and skin.

Avoid contact with clothing.

Use only in well ventilated areas.

Avoid splashes or spray in enclosed areas.

· Information about protection against explosions and fires: No special measures required.

· 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 only in the original receptacle.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- 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:

1310-73-2 sodium hydroxide (0.5-<2%)

- PEL (USA) TWA: 2 mg/m³
- REL (USA) CEV: 2 mg/m³
- TLV (USA) CEV: 2 mg/m³
- EL (Canada) CEV: 2 mg/m³
- EV (Canada) CEV: 2 mg/m³

• 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.

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Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. 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 che | emical properties |
|--|---|
| · General Information | |
| · Appearance: | 1.52-4 |
| · Form: | Liquid |
| · Color: | Amber colored |
| · Odor: | Mild |
| · Odor threshold: | Not determined. |
| · pH-value at 20 °C: | 11 |
| Change in condition | |
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | Undetermined. |
| · Flash point: | Not applicable. |
| · Flammability (solid, gaseous): | Not applicable. |
| · Ignition temperature: | |
| · Decomposition temperature: | Not determined. |
| · Auto igniting: | Product is not selfigniting. |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Explosion limits: | |
| · Lower: | Not determined. |
| · Upper: | Not determined. |
| · Vapor pressure: | Not determined. |
| · Density at 20 °C: | 1.02 g/cm ³ |
| · Relative density | Not determined. |
| · Vapor density | Not determined. |
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with | |
| · Water: | Fully miscible. |
| | (Contd. on page |

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|--|--|-----------------|
| · Partition coefficient (n-octanol/water): Not determined. | | |
| · Viscosity: | | |
| · Dynamic: | Not determined. | |
| · Kinematic: | Not determined. | |
| · Solvent content: | | |
| Organic solvents: | 0.0 % | |
| · Solids content: | 2.0 % | |
| 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:
 - No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: acids
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimates)

Oral LD50 29851 mg/kg

1310-73-2 sodium hydroxide

Oral LD50 2000 mg/kg (rat)

18662-53-8 Nitrilotriacetic acid trisodium salt monohydrate

Oral LD50 100 mg/kg (ATE)

Primary irritant effect:

- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Ingestion: Irritating to mouth, throat and stomach.
- · Sensitization: No sensitizing effects known.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

• NTP (National Toxicology Program)

None of the ingredients is listed.

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None of the ingredients is listed.

12 Ecological information

· Toxicity

· Aquatic toxicity:

1310-73-2 sodium hydroxide

- LC50 (48 h) 125 mg/L (fish)
- Persistence and degradability No further relevant information available.

· OSHA-Ca (Occupational Safety & Health Administration)

- · Behavior in environmental systems:
 - · Bioaccumulative potential No further relevant information available.
 - Mobility in soil No further relevant information available.
- · Additional ecological information:

General notes:

- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- · Results of PBT and vPvB assessment
 - · PBT: Not applicable.
 - **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

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.

| · UN-Number | |
|---------------------------|--|
| DOT, IMDG, IATA | UN3266 |
| TDG | UN3266 |
| · UN proper shipping name | |
| | Corrosive liquid, basic, inorganic, n.o.s. (Sodiur |
| | hydroxide) |
| · TDG | Corrosive liquid, basic, inorganic, n.o.s. (Sodiur |
| | hydroxide) |
| · IMDG | CORROŚIVE LIQUID, BASIC, INORGANIC |
| | N.O.S. (SODIUM HYDROXIDE) |

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|--|--|
| Transport hazard class(es) | |
| · DOT | |
| | |
| UN YU | |
| CORROSIVE | |
| | |
| · Class | 8 Corrosive substances |
| ·Label | 8 |
| · TDG | 0 Company autotanage |
| · Class | 8 Corrosive substances |
| · IMDG, IATA | |
| | |
| the state of the s | |
| | |
| V | |
| Class | 8 Corrosive substances |
| · Label | 8 |
| Packing group | |
| · DOT, IMDG, IATA | |
| · TDG | III |
| Environmental hazards: | |
| · Marine pollutant: | No |
| Special precautions for user | Warning: Corrosive substances |
| Danger code (Kemler): | 80 |
| EMS Number: | F-A,S-B |
| Segregation groups | Alkalis |
| Stowage Category Stowage Cade | A SW2 Clear of living quarters |
| Stowage Code Segregation Code | SW2 Clear of living quarters. SG35 Stow "separated from" acids. |
| | • |
| Transport in bulk according to Annex | |
| 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: |
| | ml Maximum not quantity nor outer pockagir |
| | Maximum net quantity per outer packagir 1000 ml |
| | |
| DOT (Size/package type): | LTD QTY, ORM-D, Consumer Commodity |
| | 946 mL / bottle and 3.78 L / bottle |
| UN "Model Regulation": | UN 3266 CORROSIVE LIQUID, BASI |
| - | INORGANIC, N.O.S. (SODIUM HYDROXIDE), 8, II |

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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):

None of the ingredients is listed.

• TSCA (Toxic Substances Control Act):

1310-73-2 sodium hydroxide

· Proposition 65

Chemicals known to cause cancer:

18662-53-8 Nitrilotriacetic acid trisodium salt monohydrate

· 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)

None of the ingredients is listed.

• TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

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

None of the ingredients is listed.

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

1310-73-2 sodium hydroxide

Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

Canadian Ingredient Disclosure list (limit 1%)

All ingredients are listed.

· Hazard pictograms



Signal word Warning
 Hazard statements
 Causes skin irritation.
 Causes serious eye irritation.

Suspected of causing cancer.

NA

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· Precautionary statements

Obtain special instructions before use. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take off contaminated clothing and wash it before reuse. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. Store locked up. Dispose of contents/container in accordance with local/regional/national/international

16 Other information

regulations.

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 November 25, 2015

· Revision Changes:

- v 1.0 original SDS release (June 9, 2015)
- v 2.0 updated part numbers, changed to packaging group 3 (November 25, 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 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 NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health 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