

Safety data sheet

Issue date: 07.10.2016

Version 2

Last Revision: 28.05.2015

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

- **1.1 Product identifier**
 - **Product name: Power Steering Cleaner**
 - **Part number:** 207210
 - **Application of the substance / the mixture** Power steering system cleaner
- **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
Tel: (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.
STOT SE 3 H335 May cause respiratory 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**



GHS02 GHS07

- **Signal word** Warning
- **Hazard-determining components of labelling:**
4-methylpentan-2-ol
oleic acid, pure
- **Hazard statements**
H226 Flammable liquid and vapour.
H335 May cause respiratory irritation.
- **Precautionary statements**

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261	Avoid breathing fume/spray.
P280	Wear protective gloves / eye protection / face protection.
P233	Keep container tightly closed.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P271	Use only outdoors or in a well-ventilated area.

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P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P405 Store locked up.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents in accordance with local regulations.

- **Additional information:** For Professional Use Only
- **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: 108-11-2	4-methylpentan-2-ol	10-25%
EINECS: 203-551-7	Flam. Liq. 3, H226; STOT SE 3, H335	
CAS: 112-80-1	oleic acid, pure	2.5-10%
EINECS: 204-007-1	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	

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

SECTION 4: First aid measures· **4.1 Description of first aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Wash with plenty of soap and water. Remove 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:**

Rinse mouth with water.

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If conscious, give small quantities of water to drink.

Stop if victim feels sick.

Do not induce vomiting.

If symptoms persist consult doctor.

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

Coughing

May cause respiratory tract irritation.

- **Information for doctor:** Treat Symptomatically

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- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.
Remove persons from danger area.
Avoid breathing vapor or mist.
Do not touch or walk through spilled material.
- **6.2 Environmental precautions:**
Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.
Prevent from spreading (e.g. by damming-in or oil barriers).
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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**
Avoid contact with the eyes and skin.
Avoid contact with clothing.
Use only in well ventilated areas.
Avoid splashes or spray in enclosed areas.
Keep in the original containers.
See section 8 for personal protective equipment.
Do not reuse container.
 - **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

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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 away from water.

Store in a cool dry place in tightly closed containers.

· **Further information about storage conditions:** Keep container tightly sealed.

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

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

108-11-2 4-methylpentan-2-ol (10-<25%)

WEL	Short-term value: 170 mg/m ³ , 40 ppm
	Long-term value: 106 mg/m ³ , 25 ppm
Sk	

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

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Do not eat, drink, smoke or sniff while working.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respirator protective device that is independent of circulating air.

· **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.

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SECTION 9: Physical and chemical properties· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**· **Form:**

Fluid

· **Colour:**

Light blue

· **Odour:**

Mild

· **Odour threshold:**

Not determined.

· **pH-value:**

Not determined.

· **Change in condition**· **Melting point/Melting range:**

Undetermined.

· **Boiling point/Boiling range:**

Undetermined.

· **Flash point:**

45 °C

· **Flammability (solid, gaseous):**

Not applicable.

· **Ignition temperature:**

305 °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:**

1.0 Vol %

· **Upper:**

5.5 Vol %

· **Vapour pressure at 20 °C:**

7 hPa

· **Density:**

Not determined.

· **Relative density at 20 °C**

0.9

· **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.

· **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.

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

· **LD/LC50 values relevant for classification:****ATE (Acute Toxicity Estimates)**

Oral	LD50	17267 mg/kg (rat)
Dermal	LD50	23733 mg/kg (rabbit)

108-11-2 4-methylpentan-2-ol

Oral	LD50	2590 mg/kg (rat)
Dermal	LD50	3560 mg/kg (rabbit)

112-80-1 oleic acid, pure

Oral	LD50	74000 mg/kg (rat)
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· **Primary irritant effect:**

- **Skin corrosion/irritation** May cause mild skin irritation.

· **Serious eye damage/irritation**

May cause eye irritation. Symptoms may include discomfort or pain, excessive blinking and tear production, with possible redness and swelling.

· **Inhalation:**

May cause respiratory tract irritation.
coughing

· **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**

May cause respiratory irritation.

· **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:****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.

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· **12.3 Bioaccumulative potential****108-11-2 4-methylpentan-2-ol**

Bioaccumulation | LogPow 1.43 (-) (potential low)

112-80-1 oleic acid, pure

Bioaccumulation | LogPow 7.73 (-) (potential high)

· **12.4 Mobility in soil** No further relevant information available.· **Additional ecological information:**· **General notes:**

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.

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

UN2053

· **14.2 UN proper shipping name**· **ADR**UN2053 METHYL ISOBUTYL CARBINOL
mixture· **IMDG, IATA**

METHYL ISOBUTYL CARBINOL mixture

· **14.3 Transport hazard class(es)**· **ADR**· **Class**

3 (F1) Flammable liquids.

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· Label	3
· IMDG, IATA	
	
· Class	3 Flammable liquids.
· Label	3
· 14.4 Packing group	
· ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	
· Warning:	Warning: Flammable liquids.
· Danger code (Kemler):	30
· EMS Number:	F-E,S-D
· Stowage Category	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	3
· 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":	UN 2053 METHYL ISOBUTYL CARBINOL MIXTURE, 3, 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

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- **Directive 2012/18/EU**
 - **Qualifying quantity (tonnes) for the application of lower-tier requirements** 5.000 t
 - **Qualifying quantity (tonnes) for the application of upper-tier requirements** 50.000 t
 - **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **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:** 07/OCT/2016
 - **Relevant phrases**
 - H226 Flammable liquid and vapour.
 - H315 Causes skin irritation.
 - H319 Causes serious eye irritation.
 - H335 May cause respiratory irritation.
- **Contact:** Engineering Department
- **Revision Changes:**
 - v 1.0 - initial SDS release (25/JUN/2015)
 - v 2.0 - revised (07/OCT/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
 - 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
 - Flam. Liq. 3: Flammable liquids – Category 3
 - Skin Irrit. 2: Skin corrosion/irritation – Category 2
 - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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