Issue date: 06.02.2017 v 2 Last Revision Date: 06.02.2017

1 Identification

- · Product identifier
 - · Trade name: Engine Treatment
 - · Part number: 206220
 - · Application of the substance / the mixture engine oil 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

Tel: (905) 615-8620

- · email of person responsible: 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

· Classification of the substance or mixture

Eye Irrit. 2A H319 Causes serious eye irritation.

Carc. 1B H350 May cause cancer.
Aquatic Acute 3 H402 Harmful to aquatic life.

Aquatic Chronic 3 H412 Harmful 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

· Signal word Danger

· Hazard-determining components of labeling:

zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate)

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts

· Hazard statements

Causes serious eye irritation.

May cause cancer.

Harmful to aquatic life.

Harmful to aquatic life with long lasting effects.

Precautionary statements

Obtain special instructions before use.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

Avoid release to the environment.

Do not handle until all safety precautions have been read and understood.

(Contd. on page 2)

Issue date: 06.02.2017 v 2 Last Revision Date: 06.02.2017

Trade name: Engine Treatment

(Contd. of page 1)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

If eye irritation persists: Get medical attention.

Store locked up.

Dispose of contents in accordance with local regulations.

- · Additional information: Restricted to professional users.
- · 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 components.

	· Chemical components:				
72623-86-0	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	10-25%			
84605-29-8	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	≤ 2,5%			
64742-65-0	Distillates (petroleum), solvent-dewaxed heavy paraffinic	≤ 2,5%			
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic	≤ 2,5%			
122-39-4	diphenylamine	≤ 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; consult doctor in case of complaints.
 - · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

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: Rinse out mouth. Do not induce vomiting. If symptoms persist consult doctor.
- Information for doctor: Treat Symptomatically
 - Most important symptoms and effects, both acute and delayed

Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

See section 11.

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

NA

Issue date: 06.02.2017 v 2 Last Revision Date: 06.02.2017

Trade name: Engine Treatment

(Contd. of page 2)

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.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 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.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Personal protective equipment must be worn. Avoid contact with skin, eyes or clothing. Ventilate area if spilled in a confined space or other poorly ventilated area.

Particular danger of slipping on leaked/spilled product.

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

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.

Open and handle receptacle with care.

Prevent formation of aerosols.

Material can accumulate static charges which may cause an electrical spark.

Maximum Handling Temperature: 70 °C, 158 °F

Information about protection against explosions and fires:

Keep respiratory protective device available.

· Conditions for safe storage, including any incompatibilities

Take precautions to avoid release to the environment. Store in a cool, dry, well-ventilated area. Odorous and toxic fumes may form from the decomposition of this product if stored at temperatures in excess of 113 deg F (45 deg C) for extended periods of time or if heat sources in excess of 250 deg F (121 deg C) are used. Store separately from incompatible materials. Keep container closed when not in use. Do not store in open, unlabeled or mislabeled containers. See section 10 for incompatible materials.

(Contd. on page 4)

Issue date: 06.02.2017 v 2 Last Revision Date: 06.02.2017

Trade name: Engine Treatment

(Contd. of page 3)

- · 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:

Maximum Storage Temperature: 45 °C, 113 °F

· 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:

122-39-4 diphenylamine (≤ 2,5%)

REL (USA) TWA: 10 mg/m³
TLV (USA) TWA: 10 mg/m³
EL (Canada) TWA: 10 mg/m³
EV (Canada) TWA: 10 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.

Immediately remove all soiled and contaminated clothing.

Store protective clothing separately.

· 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: Fluid

· Color: Yellow-brown

(Contd. on page 5)

Issue date: 06.02.2017 v 2 Last Revision Date: 06.02.2017

Trade name: Engine Treatment

	(Contd. of page			
· Odor:	Mild			
· Odor threshold:	Not determined.			
· pH-value:	Not determined.			
· 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:	re: 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:	Not determined.			
· Relative density at 20 °C	0,83-1,01			
· Vapor density	Not determined.			
· Evaporation rate	Not determined.			
· Solubility in / Miscibility with				
· Water:	Not miscible or difficult to mix.			
Partition coefficient (n-octanol/wa	· Partition coefficient (n-octanol/water): Not determined.			
· Viscosity:				
· Dynamic:				
· Kinematic:	Not determined.			
· 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 Heat, open flames, sparks.
- · Incompatible materials: Oxidizing agents. Halogens and halogenated compounds.

(Contd. on page 6)

Issue date: 06.02.2017 v 2 Last Revision Date: 06.02.2017

Trade name: Engine Treatment

(Contd. of page 5)

· Hazardous decomposition products:

Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Hydrogen sulfide and alkyl mercaptans and sulfides may also be released. Under combustion conditions, oxides of the following elements will be formed: calcium, sulfur.

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:

· LD/	LD/LC50 values that are relevant for classification:				
84605-29-	84605-29-8 Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts				
Oral	LD50	4468 mg/kg (rat)			
Dermal	LD50	>2000 mg/kg (rat)			
Inhalative	LC50/4 h (vapor)	>2,3 mg/L (rat)			
122-39-4	122-39-4 diphenylamine				
Oral	LD50	>800 mg/kg (rat)			
Dermal	LD50	300 mg/kg (ATE)			
Inhalative	LC50/4 h (vapor)	3 mg/L (ATE)			

· Primary irritant effect:

· on the skin:

May cause mild skin irritation. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.

- · on the eye: May cause eye irritation.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

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

Carcinogenic.

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
 - · Aquatic toxicity: Harmful to aquatic life with long lasting effects.

(Contd. on page 7)

Issue date: 06.02.2017 v 2 Last Revision Date: 06.02.2017

Trade name: Engine Treatment

(Contd. of page 6)

Persistence and degradability

84605-29-8 Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts

Persistance and Degradability 1,5%, 28 d ({ATE}) (Sturm test)

· Behavior in environmental systems:

· Bioaccumulative potential

84605-29-8 Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts

Bioaccumulation BCF 0,6 ({ATE}) (Octanol-Water Coefficient)

122-39-4 diphenylamine

Bioaccumulation BCF 3,4 ({ATE}) (Octanol-Water Coefficient)

- · Mobility in soil No further relevant information available.
- Ecotoxical effects:
 - · Remark: Harmful to 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.

Harmful to 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 T	rans	port i	inf	orma	tion

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u	14 -	INL		DEL

· DOT, ADN, IMDG, IATA Not Regulated

UN proper shipping name

· DOT, ADN, IMDG, IATA Not Regulated

· Transport hazard class(es)

· DOT, ADN, IMDG, IATA

· Class Not Regulated

(Contd. on page 8)

Issue date: 06.02.2017 v 2 Last Revision Date: 06.02.2017

Trade name: Engine Treatment

		(Contd. of page 7)
· Packing group · DOT, IMDG, IATA	Not Regulated	
· Environmental hazards: · Marine pollutant:	No	
· Special precautions for user	Not applicable.	
 Transport in bulk according to Anne MARPOL73/78 and the IBC Code 	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.	
· UN "Model Regulation":	Not Regulated	

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):

122-39-4 diphenylamine

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

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

None of the ingredients is listed.

· 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)

122-39-4 diphenylamine

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.

(Contd. on page 9)

Issue date: 06.02.2017 v 2 Last Revision Date: 06.02.2017

Trade name: Engine Treatment

(Contd. of page 8)

· Canadian Ingredient Disclosure list (limit 0.1%)

122-39-4 diphenylamine

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

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 06/FEB/2017
 - · Revision Changes:

v 1.0 - initial SDS release (26/JUN/2015)

v 2.0 - revised section 2&3 (06/FEB/2017)

· Abbreviations and acronyms:

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

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Carc. 1B: Carcinogenicity - Category 1B

Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard - Category 3

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

NA