

SAFETY DATA SHEET



SYNTHETIC BLEND HEAVY DUTY ENGINE OIL 0W-30

Compliant SDS for GHS - Canada WHMIS 2015

Section 1. Identification

GHS product identifier Commercial HDEO 0W-40, 0W-30

Product code

Other means of identification

Diesel Engine Oil

Product type Liquid

Identified uses Heavy Duty Engine Oil - Diesel Engines.

Supplier/Manufacturer Parkland Fuel Corporation

Suite 6302, 333-96th Avenue N.E. Calgary, Alberta T3K 0S3

PH 403-357-6400

EM LubricantsTechnicalSupport@parkland.ca | WEB www.bluewaveenergy.ca

Emergency telephone

number (with hours of

operation)

CANUTEC: +1-613-996-6666 or *666 (cellular) (24/7)

Bluewave Energy: Monday-Friday 8:00am-4:30pm MST 403-357-6400

Section 2. Hazards identification

OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the AQUATIC HAZARD (ACUTE) - Category 3 substance or mixture AQUATIC HAZARD (LONG-TERM) - Category 3

GHS label elements

Signal word No signal word.

Hazard statements H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention P273 - Avoid release to the environment.

ResponseNot applicable.StorageNot applicable.

Disposal P501 - Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Physical hazards not otherwise classified

None known.

otherwise classi (PHNOC)

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Section 2. Hazards identification

Health hazards not otherwise classified (HHNOC)

None known.

Section 3. Composition/information on ingredients

Substance/mixture Mixture

Other means of Diesel Engine Oil identification

CAS number/other identifiers

CAS number Not applicable.

Product code

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated Cadmium (Non-pyrophoric)	>50 >25 <0.00025	64742-54-7 68037-01-4 7440-43-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20

minutes. Get medical attention if irritation occurs.

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

not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing

aid to give mouth-to-mouth resuscitation. Maintain an open airway. Get medical

attention if symptoms occur.

Skin contact Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.

Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion If material has been swallowed, do not induce vomiting. Get medical attention

immediately.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contactNo known significant effects or critical hazards.InhalationNo known significant effects or critical hazards.Skin contactNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contactNo known significant effects or critical hazards.InhalationNo known significant effects or critical hazards.Skin contactNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.

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Section 4. First aid measures

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments No specific treatment.

Protection of first-aiders No special protection is required.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing

media

Use an extinguishing agent suitable for the surrounding fire.

None known.

Specific hazards arising from the chemical

This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any

waterway, sewer or drain.

Hazardous thermal decomposition products

No specific data.

Special protective actions

for fire-fighters

No special measures are required.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing

apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-

emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to

the environment if released in large quantities.

Methods and materials for containment and cleaning up

Spill

Contain with dikes or absorbent to prevent migration to sewers/streams. Take up small spill with dry chemical absorbent; large spills may require pump or vacuum prior to absorbent. May require excavation of severely contaminated soil.

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Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits		TWA (8 hours)		STEL (15 mins)		Ceiling					
Ingredient	List name	ppm	mg/m3	Other	ppm	mg/m3	Other	ppm	mg/m3	Other	Notations
Distillates (petroleum), hydrotreated heavy paraffinic	US ACGIH 3/2015	-	5	-	-	-	-	-	-		[a]
	AB 4/2009	-	5	-	-	10	-	-	-	-	[b]
	ON 7/2015	-	5	-	-	10	-	-	-	-	[b]
	QC 1/2014	-	5	-	-	10	-	-	-	-	[b]
Distillates (petroleum), hydrotreated heavy paraffinic	US ACGIH 3/2015	-	5	-	-	-	-	-	-	}	[b] [b] [b] [a]
	AB 4/2009	-	5	-	-	10	-	-	-	-	[b]
	ON 7/2015	-	5	-	-	10	-	-	-	-	[b] [b] [b]
	QC 1/2014	_	5	[-	-	10	-	-	-	-	[b]

Form [a]Inhalable fraction [b]Mist

Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure

they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields.

Skin protection

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Section 8. Exposure controls/personal protection

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be

worn at all times when handling chemical products if a risk assessment indicates this is

necessary.

Personal protective equipment for the body should be selected based on the task being **Body protection**

performed and the risks involved and should be approved by a specialist before

handling this product.

Other skin protection Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory protection Based on the hazard and potential for exposure, select a respirator that meets the

> appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important

aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state Liquid. Color Amber Odor Mild.

Not available. Odor threshold Ha Not available.

-51 C Freezing point

Not available. **Boiling point** Flash point Not available. Not available. **Evaporation rate** Not available. Flammability (solid, gas) Lower and upper explosive Not available.

(flammable) limits

Not available. Vapor pressure Not available. Vapor density

0.880 Relative density

Solubility in water Insoluble in water. Not available. Partition coefficient n-

octanol/water

Auto-ignition temperature Not available. **Decomposition temperature** Not available.

Viscosity Kinematic: 11 cSt (100 C)

Kinematic: 63 cSt (40 C)

Section 10. Stability and reactivity

Reactivity No specific test data related to reactivity available for this product or its ingredients.

Chemical stability The product is stable.

Possibility of hazardous

reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

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Section 10. Stability and reactivity

Conditions to avoid No specific data.

Incompatible materials Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Cadmium (Non-pyrophoric)	LD50 Oral	Rat	2330 mg/kg	-

Irritation/Corrosion

There is no data available.

Sensitization

There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Cadmium (Non-pyrophoric)	Category 1	Not determined	Not determined

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contactNo known significant effects or critical hazards.InhalationNo known significant effects or critical hazards.Skin contactNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

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Section 11. Toxicological information

Eye contactNo known significant effects or critical hazards.InhalationNo known significant effects or critical hazards.Skin contactNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate No known significant effects or critical hazards.

effects

Potential delayed effects No known significant effects or critical hazards.

Long term exposure

Potential immediate No known significant effects or critical hazards.

effects

Potential delayed effects No known significant effects or critical hazards.

Potential chronic health effects

GeneralNo known significant effects or critical hazards.CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Cadmium (Non-pyrophoric)	Acute EC50 97 IJg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute EC50 0.095 mg/L Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 200 IJg/L Fresh water	Aquatic plants - Lemna minor	4 days
	Acute EC50 13.5 IJg/L Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 0.072 IJg/L Marine water	Crustaceans - Amphipoda - Adult	48 hours
	Acute LC50 1 IJg/L Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 2 IJg/L Fresh water	Algae - Parachlorella kessleri - Exponential growth phase	72 hours
	Chronic NOEC 0.02 IJg/L Fresh water	Fish - Cyprinus carpio	4 weeks

Persistence and degradability

There is no data available.

Bioaccumulative potential

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Section 12. Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
Dec-1-ene, homopolymer, hydrogenated Dec-1-ene, oligomers, hydrogenated	>6.5	-	high

Mobility in soil

Soil/water partition coefficient (Koc)

There is no data available.

Other adverse effects

No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	TDG	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

AERG Not applicable

Special precautions for user

Transport within user's premises always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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Section 15. Regulatory information

Canadian lists

Canadian NPRI None of the components are listed.

CEPA Toxic substances None of the components are listed.

Canada inventory All components are listed or exempted.

International lists

National inventory

Australia
All components are listed or exempted.
China
All components are listed or exempted.
Europe
All components are listed or exempted.
Japan inventory (ENCS): Not determined.
Japan inventory (ISHL): Not determined.

Malaysia Not determined.

New ZealandAll components are listed or exempted.PhilippinesAll components are listed or exempted.Republic of KoreaAll components are listed or exempted.TaiwanAll components are listed or exempted.

Section 16. Other information

History

Date of issue 04/15/2016

Version 1

Prepared by KMK Regulatory Services Inc. / M.Tooth Nemco Resources Ltd.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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