



MATERIAL SAFETY DATA SHEET

Section 1: Chemical Product and Company Identification

General Product Name: G-Oil 0W20, 0W30, 5W20, 5W30, 10W30
Ultimate Biodegradable Full Synthetic Engine Oil

Synonyms: PCMO, Premium Motor Oil

Product Description: Engine Oil for Light duty and Heavy Duty Internal
Combustion Engines

CAS Number: Mixture

ASTM: D 4485-07

Manufacturer: **Green Earth Technologies, Inc.**
1136 Celebration Blvd.
Celebration, Florida 34747, U.S.A.
Phone: (877) 438-4761
Technical Assistance: (877) 438-4761

Section 2: Hazards Identification

Appearance: Amber Colored Liquid

Odor: Mild

Principal Hazards: **This material has no known health hazards**

This material is not considered hazardous by the OSHA Hazard communication Standard 29 CFR 1910. 1200.

See Section 11 for complete health hazard information.

Section 3: Composition/Information on Ingredients

Chemical Name	CAS Number	Weight %
Hydrotreated Paraffinic Distillates	Mixture	75 – 85
Proprietary Additives	Mixture	15- 25
Zinc Salts of Dialkyl Dithiophosphoric Acid	68649-42-3	< 0.5



Section 4: First Aid Measures

- Eye Contact:** Immediately flush eyes with large amounts of water and continue flushing until irritation subsides. If irritation persists call a physician. If material is hot, treat for thermal burns and take victim to hospital immediately.
- Skin Contact:** Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention. If material is hot, submerge injured area in cold water. If victim is severely burned, remove to a hospital immediately. Wash contaminated clothing before reuse.
- Inhalation:** If overcome by inhalation of hot vapors, remove to fresh air. Use oxygen if there is difficulty breathing or artificial respiration if breathing has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.
- Ingestion:** DO NOT INDUCE VOMITING. Do not induce vomiting due to aspiration hazard. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Should vomiting occur; lower head below knees to avoid aspiration. Seek immediate medical attention.
- Additional Information:** Note to physician: Treat symptomatically.

Section 5: Fire Fighting Measures

- Flash Point:** 216° C, 421° F (ASTM D 92)
- Extinguishing Media:** Use dry chemical, foam, water fog or carbon dioxide
- Firefighting Procedures:** Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.
- Unusual Fire & Explosion Hazards:** Dense smoke may be generated while burning. Toxic fumes, gases or vapors may evolve on burning. Heavy flammable vapors may settle along ground level and low spots to create an invisible fire hazard. The vapors may extend to sources of ignition and flash back.

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By-Products of Combustion: Oxides of C, Zn, Ca, P and S. Additional byproducts include Hydrogen sulfide, alkyl mercaptan and other sulfides.

Auto-Ignition- Temperature: Not Determined

Explosive Data: Not determined. Care should always be exercised in Dust/mist areas.

Section 6: Accidental Release Measures

Spill Procedures: (Land) Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames, and heaters). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Large spill, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers for disposal. If a large spill occurs notify appropriate authorities.

Spill Procedures: (Water) Remove from surface by skimming or with suitable adsorbents. If a large spill occurs notify appropriate authorities.

Waste Disposal Method: All disposals must comply with Federal, State and Local regulations. The material, if spilled or discarded may be a regulated waste. Refer to state and local regulations. Department of Transportation regulations may apply for transporting this material when spilled. See Section 14.

Section 7: Handling and Storage

Max. Handling Temp.: 45° C, 113° F

Handling Procedures: Keep containers closed when not in use. Do not transfer to unmarked containers. Fire extinguishers should be kept readily available. See NFPA 30 and OSHA 1910.106. Wash thoroughly after handling. Empty container contains product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for cleaning and reuse.

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Max. Storage Temp.: 45° C, 113° F
Storage Procedures: Store containers away from heat, sparks, open flame, or oxidizing materials.

Section 8: Exposure Controls/Personal Protection

Exposure Limits: None established
Engineering Controls: Use with adequate ventilation
Gloves Procedures: Use nitrile gloves
Eye Protection: Safety Glasses
Respiratory Protection: Under normal use conditions, respirator is not required
Clothing Recommendation: Under normal use conditions, no special clothing is required. Launder contaminated clothing before reuse.

Section 9: Physical and Chemical Properties

Vapor Pressure:	Negligible at STP (Standard Temperature and Pressure, 25°C at 1 ATM)					
Gravity by ASTM D 1298:	0W-20	0W-30	5W-20	5W-30	5w30d	10W-30
API Gravity	35.1	35.3	34.6	33.1	34.3	33.9
Specific Gravity @ 15.6 ^o C	0.8493	0.8504	0.8519	0.8597	0.8534	0.8555
Density @ 15.6 ^o C	7.087	7.097	7.109	7.174	7.122	7.139
Solubility	Negligible in water, soluble in hydrocarbon solvents					
Percent Volatile:	Negligible at STP					
Vapor Density, Air = 1:	>1 at STP					
Evaporation Rate, n-Butyl Acetate = 1:	Negligible at STP					



Odor:	Mild petroleum hydrocarbon odor					
Appearance:	Amber, clear fluid					
Viscosity by ASTM D 445:	<u>0W-20</u>	<u>0W-30</u>	<u>5W-20</u>	<u>5W-30</u>	<u>5w30d</u>	<u>10W-30</u>
cSt at 40°C (104°F)	38.52	45.18	48.29	70.88	52.43	58.41
cSt at 100°C (212°F)	8.83	10.38	8.90	11.57	10.93	11.61
Boiling Point:	Not determined. Expected to be > 260°C (500°F).					
Pour Point (°C):	<u>0W-20</u>	<u>0W-30</u>	<u>5W-20</u>	<u>5W-30</u>	<u>5w30d</u>	<u>10W-30</u>
by ASTM D 97	-39	-39	-39	-30	-38	-38
Molecular Weight:	Not determined.					

Section 10: Stability and Reactivity

Stability:	Material is normally stable at moderately elevated temperatures and pressures.
Decomposition Temp.:	Not determined
Incompatibility:	Oxidizing Agents, Acids, Halogens, Halogenated Compounds
Polymerization:	Will not occur
Thermal Decomposition:	Smoke, carbon monoxide, carbon dioxide.
Conditions to Avoid:	Avoid high temperatures and product contamination.

Section 11: Toxicological Information

*ACUTE EXPOSURE *

Eye Irritation:	Not expected to cause eye irritation. Based on data from components or similar materials.
Skin Irritation:	Not expected to be a primary skin irritant. Based on data from components or similar materials. 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.
Respiratory Irritation:	Under good industrial hygiene practices where all exposure

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limits are observed, respiratory irritation should not be a problem. If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract similar to that observed with mineral oils.

Dermal Toxicity:

Not Determined.

Inhalation Toxicity:

On rare occasions, prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as chronic lung inflammation. This condition is usually asymptomatic as a result of repeated small aspirations. Shortness of breath and cough are the most common symptoms. Based on data from similar materials.

Oral Toxicity:

Not Determined.

Dermal Sensitization:

Prolonged or repeated contact may make skin more sensitive to other skin sensitizers. Based on data from similar materials.

Inhalation Sensitization:

No data available to indicate product or components may be a respiratory sensitizer.

Other:

This product contains petroleum base oils, which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils require a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

Section 12: Ecological Information

ENVIRONMENTAL TOXICITY

This material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

ENVIRONMENTAL FATE

Biodegradation:

This product is rated Ultimate Biodegradable in which it will biodegrade greater than or equal to 60% in 28 days.

Bioaccumulation:

This material displays no potential to bio concentrate.



Section 13: Disposal Considerations

- Waste Disposal:** Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state, and local laws.
- Disposal Consideration:** Place used, contaminated, or excess material into disposable containers and dispose of in a manner consistent with local and state regulations. Contact local environmental or health authorities for approved disposal of this material. Most used oil is reclaimed or incinerated.

Section 14: Transport Information

U.S. DOT Information

- Bulk Shipping Description:** Does not apply to bulk oil shipping.
- Non-Bulk Shipping Desc:** Does not apply to non-bulk oil shipping.
- Identification Number:** Not applicable.
- Hazard Classification:** Not applicable.
- Other:** See 49 CFR for additional requirements for descriptions, allowed modes of transport and packaging. For more information concerning spills during transport, consult latest DOT Emergency Response Guidebook for Hazardous Materials Incidents.

Review classification requirements before shipping materials at elevated temperatures.

Section 15: Regulatory Information

- Clean Water Act/Oil Pollution Act:** Under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Control Act of 1990, this material is considered an oil. Any spills or discharges that produce a visible sheen or film on surface of water, or in waterways, ditches, or sewers leading to surface

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water must be reported. Contact the National Response Center at 800-424-8802.

TSCA: All components of this material are listed in the U.S. TSCA Inventory.

Other TSCA: Not applicable.

SARA Title III:	Section 302/304	Extremely Hazardous Substances:	None
	Section 311/312	<u>Hazard Categorization:</u>	
		Acute (immediate health effects):	Yes
		Chronic (delayed health effects):	No
		Fire (hazard):	No
		Reactivity (hazard):	No
		Pressure (sudden release hazard):	No
	Section 313	Toxic Chemicals:	Zinc <0.10%

CERCLA: For stationary sources - reportable quantity: Not determined.
 Due to: Not applicable.
 For moving sources - reportable quantity: Not determined.
 Due to: Not applicable.

Recommend contacting the local authorities in the event of any type of spill to determine local reporting requirements and also to aid in the cleanup.

California Prop. 65: Not applicable.

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Section 16: Other Information

	NFPA 704	NPCA-HMIS	KEY
HEALTH:	1	1	0 = Minimal
FIRE:	1	1	1 = Slight
REACTIVITY:	0	0	2 = Moderate
SPECIFIC HAZARD:	NONE	N/A	3 = Serious
PROTECTION INDEX:	N/A	B	4 = Severe

This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, Cross Packaging must rely upon information provided by the material manufacturers or distributors.

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