

Safety Data Sheet

HCS 25 Treating Oil

Revision date: January 15, 2015

1. IDENTIFICATION

Product Name: HCS 25 Treating Oil
Application and use: Wood and wood pole process oil
Product Description: A mixture of aliphatic hydrocarbons and methyl esters from lipid sources

Company: Renewable Resource Group, Inc.
361 West Fifth Ave.
Eugene, OR 97401

Phone: 541-485-8404 or 800-262-5973

EMERGENCY PHONE NUMBERS

CHEMTREC: 800-424-9300

2. HAZARDS IDENTIFICATION

Potential Health Effects:

EYE CONTACT: May cause irritation. Irrigate eye with water for at least 15 to 20 minutes. Seek medical attention if symptoms persist.

SKIN CONTACT: Contact may cause mild skin irritation including redness, and a burning sensation. Prolonged or repeated contact can worsen irritation by causing drying and cracking of the skin leading to dermatitis (inflammation). Not acutely toxic by skin absorption, but prolonged or repeated skin contact may be harmful (see Section 11).

INHALATION: Negligible unless heated to produce vapors. Vapors or finely misted materials may irritate the mucous membranes and cause irritation, dizziness, and nausea. Remove to fresh air.

INGESTION: No hazards anticipated from ingestion incidental to industrial exposure.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

This product contains no hazardous materials as defined under the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) or the Canadian Hazardous Products Act S.C. 1987, C.30 (Part1). This product does not contain any Hazardous Air Pollutants as defined in Section 112(b)(1) of the 1990 Clean Air Act.

Component	Concentration (wt%)	Exposure Limits			
		ACGIH:	OSHA:	NIOSH:	OTHER:
Hydrotreated Distillate, Light Naphthenic CAS 64742-53-6	10-90	5 mg/m ³ TWA	5 mg/m ³	2500 mg/m ³ IDLH	As Oil Mist, if generated 5 mg/m ³ NOHSC TWA
Alkyl C14-C24 Methyl Esters CAS 67784-80-9	10-50	None	None	None	None

4. FIRST AID MEASURES

EYE CONTACT: Irrigate eyes with heavy stream of water for at least 15 to 20 minutes. Seek medical attention if symptoms persist.

SKIN CONTACT: Wipe material from skin and remove contaminated shoes and clothing. Cleanse affected area(s) thoroughly by washing with mild soap and water and, if necessary, a waterless skin cleanser. If irritation or redness develops and persists, seek medical attention.

INHALATION: If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

INGESTION: Give one or two glasses of water to drink. If gastro-intestinal symptoms develop, consult medical personnel. Never give anything by mouth to an unconscious person..

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5. FIRE FIGHTING MEASURES

FLASH POINT & METHOD USED:	>300° F (150° C) (PMCC)
FLAMMABLE LIMITS:	None known
EXTINGUISHING MEDIA:	Dry chemical, foam, halon, CO2 water spray (fog). Water stream may splash the burning liquid and spread fire. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.
Fire Fighting Instructions:	Treat as oil fire. For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).
UNUSUAL FIRE AND EXPLOSION HAZARDS:	This material may burn, but will not ignite readily. If container is not properly cooled, it can rupture in the heat of a fire.

6. ACCIDENTAL RELEASE MEASURES

This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release.

Stay upwind and away from spill/release. Notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Contain spill/release to smallest area possible. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 8).

Prevent spilled material from entering sewers, storm drains and other unauthorized drainage systems and natural waterways. Dike far ahead of spill for later recovery or disposal. Pick up small spills with absorbent materials such as "Oil Dry", sand or dirt. Wash hard surfaces with safety solvent or detergent to remove remaining oil film. Greasy nature will result in a slippery surface. For large spills, notify fire authorities and appropriate federal, state and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon navigable waters, the contiguous zone or adjoining shorelines, notify the National Response Center (phone number 800-424-8802).

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7. HANDLING AND STORAGE

Handling: Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection (Section 8) is advised when concentrations exceed any established exposures limits (see Sections 2).

Do not wear contaminated clothing or shoes. Use good personal hygiene practices.

“Empty” containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition. They may explode and cause injury or death. “Empty” drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Before working on or in tanks which contain or have contained this material, refer to OSHA regulation, ANSI Z49.1, and other references pertaining to cleaning, repairing, welding or other contemplated operations.

Storage: Store in closed containers between 32 F and 120F. Keep away from oxidizing agents, excessive heat and ignition sources. Keep container(s) tightly closed. Store only in approved containers. Do not store or use near heat, spark or flame. Store out of sun. Protect container(s) against physical damage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional engineer controls may be required.

Personal protection equipment (PPE):

Respiratory: A NIOSH certified air purifying respirator with a Type 95 (R or P) particulate filter may be used under conditions where airborne concentrations are expected to exceed exposure limits (see Section 2).

Protection provided by air purifying respirators is limited (see respirator manufacturer’s selection guide). Use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode if there is potential for an uncontrolled release, exposure levels are not know, or any other circumstances where air purifying respirators may not provide adequate protection.

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A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin: The use of gloves impervious to the specific material handled is advised to prevent skin contact and possible irritation (see manufactures' literature for information on permeability).

Eye protection: Approved eye protection to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

Other Protective Equipment: A source of clean water should be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

Employees must practice good personal hygiene, washing exposed areas of skin several times daily and laundering contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND COLOR: GOLDEN AMBER TO RED

PHYSICAL FORM: LIQUID

ODOR: MILD PETROLEUM

BOILING POINT: OVER 400° F AT 760 MM HG PRESSURE

VAPOR PRESSURE: LESS THAN 1 mm HG AT 72° C

VAPOR DENSITY (air=1): GREATER THAN 1

SPECIFIC GRAVITY: 0.8626 AT 15° C

SOLUBILITY IN WATER: NEGLIGIBLE AT ROOM TEMPERATURE

MELTING POINT: -9° C

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10. STABILITY AND REACTIVITY

Stability:	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Conditions to Avoid:	Extended exposure to high temperatures (> 150 C) can cause decomposition.
Material to Avoid (Incompatible Materials):	Avoid contact with strong oxidizing agents.
Hazardous Decomposition Products:	Combustion can yield carbon, nitrogen, carbon dioxide and carbon monoxide along with thick smoke
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

Chronic Data:

The petroleum base oils contained in this product have been highly refined by a variety of processes including severe hydrocracking/hydroprocessing to reduce aromatics and improve performance characteristics. All of the oils meet the IP-346 criteria of less than 3 percent PAH's and are not considered carcinogens by NTP, IARC or OSHA.

Target Organ: Administration of certain mineral hydrocarbon white oils in the diet of Fischer 344 rats at 1500 mg/kg/day for 90 days resulted in the formation of microgranulomas in the liver. However, this response was not observed in studies conducted with other rat strains or dogs. Microgranulomas like those observed in the Fischer 344 rat studies have not been observed in humans.

12. ECOLOGICAL INFORMATION

HCS 25 Treating Oil is a complex mixture of hydrocarbons (primarily branched chain alkanes, cycloalkanes and methyl esters) ranging in carbon number from C15 to C50. This oil has negligible levels of aromatic hydrocarbons. Olefins are found only at very low concentrations. Volatilization is not significant after release to the environment due to the very low vapor pressure of the hydrocarbon constituents. In water, oil will float and will spread at a rate that is viscosity dependent. Water solubilities are very low and dispersion occurs mainly from water movement with adsorption by sediment being the major fate process. In soil, oil shows little mobility and adsorption is the predominate physical process.

Both acute and chronic ecotoxicity studies have been conducted on the base oils. Results indicate that the acute aquatic toxicities to fish, Daphnia, Ceriodaphnia and algal species are above 100 mg/l using either water accommodated fractions or oil in water dispersions. Since base oils mainly contain hydrocarbons having carbon

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numbers in the range C15 to C50, it is predicted that acute toxicity would not be observed with these substances due to low water solubility. Results from chronic toxicity tests show that the no observed effect level (NOEL) usually exceeds 100 mg/l for base oils with the overall weight of experimental evidence leading to the conclusions that base oils do not cause chronic toxicity to fish and invertebrates.

Large volume spills of oils into water will produce a layer of undissolved oil on the water surface that will cause direct physical fouling of organisms and may interfere with surface air exchange resulting in lower levels of dissolved oxygen. Petroleum products have also been associated with causing taint in fish even when the latter are caught in lightly contaminated environments. Highly refined oil, such as HCS 25 Treating Oil sprayed onto the surface of eggs will result in a failure to hatch.

Extensive experience from laboratory and field trials in a wide range of crops has confirmed that little or no damage is produced as a result of either aerosol exposure or direct application of oil emulsion to the leaves of crop plants. Base oils incorporated into soil have resulted in little or no adverse effects on seed germination and plant growth at contamination rates up to 4%.

13 DISPOSAL CONSIDERATIONS

Waste Disposal

Waste may be disposed of by a licensed waste disposal company. Contaminated absorbent material may be disposed of in an approved landfill. Follow local, state and federal disposal regulation.

14. TRANSPORT INFORMATION

U.S. Department of Transportation (DOT)

Shipping Description: Not regulated

Note: Material is unregulated unless shipped by land in a packaging having a capacity of 3,500 gallons or more. Then the provision of 49 CFR, Part 130 apply.

International Maritime Dangerous Goods (IMDG)

Shipping Description: Not regulated

International Civil Aviation Org./ International Air Transport Assoc. (ICAO/IATA)

Shipping Description: Not regulated.

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15. REGULATORY INFORMATION

OSHA STATUS	Non-hazardous components as defined under the U.S. OSHA hazard communication standard (29 CFR 1910.1200) or the Canadian Hazardous Products Act S.C. 1987, C.30 (part 1). (See Section 2.)
TSCA STATUS	This products components are listed on TSCA
CERCLA	Not reportable
SARA TITLE III	Section 312 Extremely Hazardous Substances: None Section 311/312 Hazard Categories: None Section 313 Toxic Chemicals: None
RCRA STATUS	If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived form the product should be classified as a hazardous waster, (40 CFR 261.20-24).
CALIFORNIA PROPOSITION 65:	The following statement is made in order to comply with the California safe Drinking Water and Toxic Enforcement Act of 1986. This product contains no chemicals know to the state of California to cause cancer.

16. Other Information

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Renewable Resource Group, Inc. bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.

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