

H-V2000

Date of Preparation: October 1, 2009

Section 1 - Chemical Product and Company Identification

Product Name: H-V2000
Chemical Name: Severely Hydrotreated Heavy Naphthenic Distillate
Chemical Family: Petroleum Distillate
Chemical Formula: Not Applicable
CAS Number: 64742-52-5
Other Designations: Contains Oil
Manufacturer: Ergon Refining, Inc., P.O. Box 309, Vicksburg, MS 39181
Company Contact: Will Poe, Phone (601) 630-8319

EMERGENCY TELEPHONE NUMBERS:

Ergon Refining, Inc. (601) 638-4960 Normal Business Hours
 Chemtrec (800) 424-9300 After Business Hours

Section 2 - Composition / Information on Ingredients

A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces finished oil with a viscosity near 2000 SUS @ 100°F (390 cSt @ 40°C).

Ingredient Name	CAS Number	% vol
Severely Hydrotreated Heavy Naphthenic Petroleum Oil	64742-52-5	100.0

Trace Impurities:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Severely Hydrotreated Heavy Naphthenic Petroleum Oil	5 mg/m ³ (oil mist)	none estab.	5 mg/m ³ (oil mist)	10 mg/m ³ (oil mist)	none estab.	none estab.	none estab.

Section 3 - Hazards Identification

☆☆☆☆☆ **Emergency Overview** ☆☆☆☆☆
 Not Expected to cause a severe emergency hazard.

HMIS
H 1
F 1
R 0
PPE† B
 †Sec. 8

Potential Health Effects

Primary Entry Routes: Skin

Inhalation: Inhalation of vapors or mist may be irritating to respiratory passages. Target Organ for mineral oil mist is lungs. Prolonged exposure may result in dizziness and nausea.

Eye: Eye contact may result in slight irritation and redness.

Skin: Short term contact with skin is unlikely to cause any problems; excessive or prolonged and repeated contact and poor hygiene conditions may result in dryness, dermatitis, erythema, oil acne, cracking and defatting of the skin.

Ingestion: May result in nausea or stomach discomfort.

Carcinogenicity: Based on OSHA 1910.1200 and IARC study requirements, this product does not require labeling. Meets EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP 346. NTP and OSHA do not list this product as a potential carcinogen.

Mutagenicity: This product gives negative mutagenic results from Modified Ames Assay.

Medical Conditions Aggravated by Long-Term Exposure: Personnel with pre-existing skin disorders should avoid contact with this product

Section 4 - First Aid Measures

Eye Contact: Wash with water. If irritation or redness persists seek medical help.

Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing. Reuse only after cleaning.

Inhalation: Remove to fresh air. Assist breathing if necessary. Seek medical help.

Aspiration: If there is any suspicion of aspiration into the lungs obtain medical advise.

Ingestion: If swallowed, observe for signs of stomach discomfort or nausea. If symptoms persist, seek medical help. Do not induce vomiting.

Section 5 - Fire-Fighting Measures

Flash Point: $\geq 470^{\circ}\text{F}$ (243°C)

Flash Point Method: COC

Burning Rate: Not available

Autoignition Temperature: $> 600^{\circ}\text{F}$ ($> 315^{\circ}\text{C}$)

Lower Explosive Level (LEL): Not determined

Upper Explosive Limit (UEL): Not determined

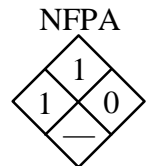
Flammability Classification: OSHA Class III-B Combustible Liquid

Extinguishing Media: Halon, dry chemical, foam, CO₂ and water mist or fog. Water may be used to cool below flash point.

Unusual Fire or Explosion Hazards: Do not use forced stream as this could cause fire to spread.

Combustion Products: Fumes, smoke and carbon monoxide.

Fire-Fighting Instructions and Equipment: Use water to cool containers exposed to flames. Do not enter enclosed or a confined work space without proper protective equipment. Fire fighting personnel should wear respiratory protection (positive pressure if available).



Section 6 - Accidental Release Measures

Spill /Leak Procedures: Stop spill at source if possible without risk. Contain spill. Eliminate sources of ignition. Spill area will be slick. Recover all possible material for reclamation. Use non-flammable absorbent material to pick up remainder of spill.

Spill to Navigable Waters: If this material is spilled into navigable waters and creates a visible sheen, it is reportable to the National Response Center.

Section 7 - Handling and Storage

Handling and Storage Precautions: Keep away from flames, sparks or hot surfaces. Never use a torch to cut or weld on or near container. Empty oil containers can contain explosive vapors. NFPA Class IIIB storage. Wash thoroughly after handling.

Work / Hygienic Practices: Wash hands with soap and water before eating, drinking, smoking or use of toilet facilities. Do not use gasoline, solvents, kerosene, or harsh abrasive skin cleaners for washing exposed skin areas. Take a shower after work if general contact occurs. Remove oil-soaked clothing and launder before reuse. Discard contaminated shoes and leather gloves.

Shelf Life: Product should be stored in clean, dry containers at ambient temperatures and it should remain stable with exception of slight color stability loss unless it is contaminated.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Adequate ventilation is required where excessive heating or agitation may occur to maintain concentration below exposure limits.

Eye / Face Protection: Safety glasses or face shield where splashing is possible.

Skin Protection: As needed to prevent repeated skin contact. Solvent resistant gloves should be used if needed.

Respiratory Protection: Not Normally Needed. Respirator should be used in areas where vapor concentrations are excessive due to high temperatures or where oil misting occurs.

Section 9 - Physical and Chemical Properties

<p>Physical State: Liquid Appearance: Clear & bright Color: Amber Odor: Mild Petroleum Odor Odor Threshold: Not determined Vapor Pressure: Not applicable Vapor Density (Air=1): > 5 Specific Gravity (H₂O=1): 0.92</p>	<p>Water Solubility: Nil Boiling Point: 700-1100°F (370-595°C) Melting Point: 25°F (-4°C) % Volatile: Nil (LVP-VOC) Evaporation Rate: Not available pH: Not applicable</p>
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Section 10 - Stability and Reactivity

Stability: Stable
Polymerization: Polymerization will not occur.
Chemical Incompatibilities: Strong Oxidizers.
Conditions to Avoid (Stability): Sources of ignition.
Hazardous Decomposition Products: Combustion products include carbon dioxide and carbon monoxide.

Section 11- Toxicological Information

Acute Toxicity: Tests on similar materials show a low order of acute oral and dermal toxicity.

Acute Oral Effects: Tests on similar materials indicate low order of acute oral toxicity.

Acute Inhalation Effects: Low acute toxicity expected on inhalation.

Eye Irritation: Minimal irritation on contact. Eye irritation slight or practically non-irritating based on similar products.

Skin Effects: Practically non-toxic if absorbed. Other similar highly refined products have not shown skin tumors in mouse skin painting studies.

Skin Irritation: May cause mild irritation with prolonged and repeated exposure.

Skin Sensitization: Skin sensitization is indicated as non-sensitizing based on data from similar products.

Carcinogenicity:

Skin: Not considered a potential carcinogen based on IP346 DMSO of less than 3.0 wt%.

Genotoxicity: This product is considered non-mutagenic and has negative potential for tumor development based on results from Modified Ames Assay, with Mutagenic Index of less than 1.0.

This product is severely hydrotreated at greater than 800 psi, and does not require a cancer warning under OSHA Hazard Communication Standard (29 CFR 1910.1200). Similar products have not been listed in NTP reports, and are classified by IARC as having inadequate evidence of carcinogenicity. IARC indicates that based on preponderance of data highly refined mineral oils are not mutagenic either *in vitro* or *in vivo*. Severely hydrotreated naphthenic petroleum oils have not been found to be carcinogenic or potential carcinogens

Section 12 - Ecological Information

Aquatic Release: Advise authorities if product has entered or may enter watercourses or sewer drains.

Ecotoxicity: Available data indicate this product is not acutely toxic. 96 hr. acute static toxicity for *Pimephales promelas* (Fathead Minnow) LC₅₀ mortality is greater than 30,000 mg/L. Other similar products have shown 48 hr EL₅₀ for *Daphnia magna* greater than 1000 mg/L, and 96 hr IrL₅₀ for *Scenedesmus subspicatus* (Alga) greater than 1000 mg/L.

Biodegradability: This product reaches less than 10% biodegradation in standard 28-day test and is not readily biodegradable in the environment.

Section 13 - Disposal Considerations

Follow Federal, State, and Local regulations. Not a RCRA hazardous waste if uncontaminated. If "used", RCRA criteria must be determined. Do not flush to drain / storm sewer. Contract to authorized disposal service. If permitted incineration may be practical. Consider recycling.

Section 14 - Transport Information

Proper Shipping Name: Not regulated by DOT (Contains Oil)
Hazard Class: Not Applicable
DOT ID No.: Not Applicable
DOT Shipping Label: Not regulated by DOT

Section 15 - Regulatory Information

U.S. Federal Regulatory Information:

CERCLA / SARA

302/303/304 Categories: Extremely Hazardous Substances No
 (40 CFR 355 Appendix A)

311/312 Categories: Immediate (Acute) Health Effects No
 (40 CFR 370) Delayed (Chronic) Health Effects No

Fire Hazard No

Sudden Release of Pressure Hazard No

Reactivity Hazard No

313 Categories: Toxic Chemicals (40 CFR 372) No

Clean Air Act: Hazardous Air Pollutants (HAPS) No

Ozone Depleting Compounds (ODC) No

Clean Water Act: If spilled into navigable waters it is reportable to National Response Center, 800-424-8802

(40 CFR 116; 401.15) Reportable Quantity = Oil Sheen present on navigable water surface

OSHA (29 CFR 1910): This product is not hazardous under Hazard Communication Standard 29 CFR 1910.1200

RCRA (40 CFR 261.33) This product does not meet hazardous waste criteria.

EPA/TSCA Inventory: The components of this product are listed on the EPA/TSCA inventory of chemicals.
 CAS No. 64742-52-5

State Regulations:

California Prop 65 No Proposition 65 chemicals exist in this product, no labeling required.

Florida No listed ingredients are present

Massachusetts RTK No listed ingredients are present

Minnesota RTK No listed ingredients are present

New Jersey RTK Lists petroleum oil, but this product does not contain hazardous ingredients.

Pennsylvania RTK Lists petroleum oil, but this product does not contain hazardous ingredients greater than 3%.

Illinois DOL TSL No listed ingredients are present

Other Regulations:

WHMIS (Canada) Not listed on the Canadian Controlled Product Ingredient Disclosure and is compliant with Controlled Products Regulation

CONEG Metals: Since cadmium, chromium, lead and mercury are not detectable and it does not exceed 100 ppm total in this product, it is compliant with CONEG Metals regulation.

EEC (Europe): This product is not known to be a dangerous good internationally.

No known R-Phrases or S-Phrases

Hazard Label None

Danger Symbol None

Foreign / International Inventories: The components of this product are listed under the following foreign inventories:
 European Union's EINICS No. 265-155-0
 Korea's ECL No. KE-12543
 Australia's AICS No. 64742-52-5
 Canada's DSL No. 64742-52-5
 Philippines' PICCS – on List

Section 16 - Other Information

Abbreviations

ACGIH (American Conference of Governmental Industrial Hygienists); ANSI (American National Standards Institute); CAS (Chemical Abstract Service); CERCLA (Comprehensive Environmental Response, Compensation, & Liability Act); CFR (Code of Federal Regulations); CHIP (Chemicals Hazard Information & Packaging for Supply); CONCAWE (European Organization for Environment, Health & Safety); CPR (Controlled Products Regulations); DOL (Department of Labor); EEC (European Economic Community Directives); EINECS (European Inventory of Existing Commercial Chemical Substances); EL₅₀ (Effective loading rate required to immobilize 50% invertebrate species); ELINCS (European List of New Chemical Substances); EPA (Environmental Protection Agency); EPCRA (Emergency Planning & Community Right-To-Know Act of 1986); EU (European Union); FDA (Food & Drug Administration-USA); GHS (Global Harmonization System); HCS (Hazard Communication Standard); IARC (International Agency for Research on Cancer); ILO (International Labor Organization); LC₅₀ (Lethal Concentration 50% test organisms); LD₅₀ (Lethal Dose 50% test organisms); LVP-VOC (Low Vapor Pressure Volatile Organic Compound); MSDS (Material Safety Data Sheet); MSHA (Mine Safety & Health Administration); NIOSH (National Institute of Occupational Safety & Health); NTP (National Toxicology Program); OSHA (Occupational Safety & Health Administration); PEL (Permissible Exposure Limit); Prop 65 (California Proposition 65); PMCC (Pensky Martin Closed Cup); RCRA (Resource Conservation & Recovery Act); RTK (Right-To-Know); R-Phrases (EU Risk Phrases); S-Phrases (EU Safety Phrases); SARA (Superfund Amendments & Reauthorization Act); TSCA (Toxic Substances Control Act); TSL (Toxic Substance List); TLV (Threshold Limit Value); WHMIS (Workplace Hazardous Materials Information System-Canada); IrL₅₀ (Inhibitory loading rate required to reduce algal growth rate by 50%); Ibl₅₀ (Inhibitory loading rate required

NFPA Hazard Rating

- Health	1 Slight
- Fire	1 Slight
- Reactivity	0 Least

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Supersedes MSDS Dated:	January 1, 2007	Changed date
	May 9, 2005	Changed date
	June 1, 2003	Changed date
	January 18, 2002	Revised date and deleted 2 nd paragraph foreign inventory Sec. 15
	January 1, 2000	Updated foreign inventory, clarified product appearance & color, added additional regulatory information, added abbreviations, enhanced toxicology/ecology, added format source, revised data
	September 1, 1997	revised date

This MSDS complies with OSHA Hazard Communication Standard (HCS) 29 CFR 1910.1200 and conforms to ANSI Z 400.1 16-Section Format.

Disclaimer: Ergon Refining, Inc. believes this information is accurate but not all-inclusive in all circumstances. It is the responsibility of the user to determine suitability of the material for their purposes. No warranty, expressed or implied, is given.