

Section 1 - Identification of the Substance and Company

Product Name: Hygold MVI 2000
Chemical Name: Severely Hydrotreated Heavy Naphthenic Distillate / Hydrotreated Residual Oils
Chemical Family: Petroleum Distillates Blend
Chemical Formula: Not Applicable
EC (EINECS) Number: 265-160-8 / 265-155-0
CAS Number: 64742-57-0 / 64742-52-5
Industrial category: Petroleum
Other Designations: Petroleum distillates, mineral oil
Manufacturer: Ergon Refining, Inc., P.O. Box 309, Vicksburg, MS 39181
 Will Poe, Phone: 1-601-630-8319; email: will.poe@ergon.com

EMERGENCY TELEPHONE NUMBERS:

Ergon Refining, Inc. (601) 638-4960 Normal Business Hours
 Chemtrec 1- 800- 424-9300 After Business Hours (North America)
 1-703-527-3887 (International)

Section 2 - Hazards Identification

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

Classification: Nonhazardous

Human and Environmental 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.

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.

Eye: Eye contact may result in slight irritation and redness. Temporary redness or burning may occur.

Ingestion: May result in nausea or stomach discomfort, may have a laxative effect if swallowed.

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.

Other Effects

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

Section 3 - 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 greater than C20 through C50, boiling above 400°C and produces a finished oil with viscosity near 2100 SUS @ 100 °F (394 cSt @40°C).

Ingredient Name	EC No.	CAS No.	% Vol.	Classification
Residual Oils, Hydrotreated (petroleum)	265-160-8	64742-57-0	55-75	Nonhazardous
Distillates, Hydrotreated Heavy Naphthenic	265-155-0	64742-52-5	25-45	Nonhazardous

Section 4 - First Aid Measures

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

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

Eye Contact: Wash with large amounts of water for 15 minutes. If irritation or redness persists seek medical help.

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

Information for Physicians: If there is any suspicion of aspiration into the lungs obtain medical advice.

Section 5 - Fire-Fighting Measures

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

Extinguishing Methods Not Used: Do not use forced stream as this could cause fire to spread.

Exposure Hazard (Combustion Products): Fumes, smoke and carbon monoxide.

Fire-Fighting Equipment: Fire fighting personnel should wear respiratory protection (positive pressure if available).

Fire-Fighting Instructions: Use water to cool containers exposed to flames. Do not enter enclosed or a confined workspace without proper protective equipment. Do not point solid water stream directly into burning oil to avoid spreading.

Section 6 - Accidental Release Measures

Personal Precautions:

Spill /Leak Procedures: Stop spill at source if possible without risk. Contain spill. Eliminate sources of ignition. Wear appropriate protective equipment and clothing during clean-up. Spill area will be slick.

Environmental Precautions:

Spill to Navigable Waters: If this material is spilled into navigable waters and creates a visible sheen, mutual assistance may be obtained from National Response Center.

Water Hazard Class: WGK 1 (Slightly water polluting)

Methods For Clean-up:

Recover all possible material for reclamation. Use non-flammable absorbent material to pick up remainder of spill. Surfaces may become slippery after spillage. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth. Scoop up used absorbent into drums. Dispose of spent absorbent in an approved industrial waste landfill.

Section 7 - Handling and Storage

Handling:

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. 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. Avoid getting this material into contact with your skin and eyes. Avoid the generation of oil mists. Take a shower after work if general contact occurs. Remove oil-soaked clothing and laundry before reuse. Discard contaminated shoes and leather gloves.

Storage:

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. Do not store this material in open or unlabeled containers.

Section 8 - Exposure Controls / Personal Protection

Exposure Limit Values:

EUROPE:

Workplace Exposure Limits (WELs) / Occupational Exposure Limits (OELs) : None established

INTERNATIONAL:

GETIS International Limit values: 8 Hr Limit: 5 mg/m³ STL: 10 mg/m³ (UK, ES, CA, US)

UNITED STATES:

Trace Impurities:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
Residual Oils (petroleum), Hydrotreated	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.
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.

Exposure Controls:

Occupational Exposure Controls:

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.

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.

Environmental Exposure Controls:

Adequate ventilation is required where excessive heating or agitation may occur to maintain concentration below exposure limits. If oil mists are generated, observe the exposure limits.

Section 9 - Physical and Chemical Properties

Physical State: Liquid	Water Solubility: Nil
Appearance: Clear & bright	Boiling Point: ≥ 700°F (370°C)
Color: Yellow to Amber	Pour Point: 5°F (-15°C)
Odor: Mild Petroleum (Hydrocarbon) Odor	Evaporation Rate: Not available
Odor Threshold: Not determined	pH: Not applicable
Vapor Pressure: Not applicable	Molecular weight: 572
Vapor Density (Air=1): 1	Flash point: 495°F (257°C) typical COC
% Volatile: Nil (LVP-VOC)	Autoignition temperature: > 315 °C
Specific Gravity (H₂O=1): 0.9100	Lower Explosive Level (LEL): Not determined
Viscosity: near 2100 SUS@100°F (395 cSt @ 40°C)	Upper Explosive Limit (UEL): Not determined

Section 10 - Stability and Reactivity

Conditions to Avoid (Stability): Sources of ignition, high temperature and open flame.

Materials to Avoid / Chemical Incompatibilities: Strong Oxidizers.

Hazardous Decomposition Products: Combustion products include carbon dioxide, carbon monoxide, oxides of sulfur & nitrogen.

Polymerization: Polymerization will not occur.

Stability: Stable

Section 11- Toxicological Information

Acute Effects:

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

Acute Inhalation Toxicity: Low acute toxicity expected on inhalation.

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

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

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

Sensitization:

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

CMR Properties:

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

Mutagenicity: 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

Ecotoxicity: Available data indicate this product is not acutely toxic. 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. No other information is available on ecotoxicity of this product

Biodegradability: No information available; based on similar product is not readily biodegradable in the environment.

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

Section 13 - Disposal Considerations

Disposal: Consider recycling. If permitted incineration may be practical.

Additional: Follow National and Local regulations. Do not flush to drain / storm sewer. Contract authorized disposal service.

Section 14 - Transport Information

Land

DOT – Not regulated
ADR (Road) – Not classified
RID (Rail) – Not classified

Air

ICAO / IATA (Air) – Not classified

Sea

IMDG / IMO (Water) – Not classified

Section 15 - Regulatory Information

EU (European) REGULATIONS: This product does not need to be labeled in accordance with EC directives and is not known to be a dangerous goods internationally.

REACH: This product is pre-registered with ECHA.

Labelling:

Hazard Label None

Danger Symbol None

Phrases: None

Restrictions on use (uses advised against): This product has poor compatibility with certain types of rubber; therefore verify material compatibility before using.

OTHER REGULATIONS

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

United States Federal Regulatory Information:

CERCLA / SARA

302/303/304 Categories: Extremely Hazardous Substances No

311/312 Categories: Immediate (Acute) Health Effects No
Delayed (Chronic) Health Effects No
Fire Hazard No
Sudden Release of Pressure Hazard No

313 Categories:	Reactivity Hazard	No
Clean Air Act:	Toxic Chemicals (40 CFR 372)	No
	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 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. 64742-57-0 / 64742-52-5	

United States - 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
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.

Foreign / International Inventories:	The components of this product are listed under the following foreign inventories: European Union's EINICS No. 264-160-8 / 265-155-0 USA's TSCA CAS No. 64742-57-0 / 64742-52-5 Korea's ECL KE-12543 Australia's AICS No. 64742-57-0 / 64742-52-5 Canada's DSL No. 64742-57-0 / 64742-52-5 Philippines' PICCS New Zealand's NZIoC (ERMA) Japan's METI or NITE Sweden's KemI
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Section 16 - Other Information**Relevant R-Phrases & Hazards**

EC Label: None (Non-hazardous)
Hazard Symbol: None
R-Phrase: None
S-Phrase: None

Training recommendations: Person placing substance on market shall ensure that competent persons have received appropriate training.

Restrictions on use (uses advised against): This product has poor compatibility with certain types of rubber; therefore verify material compatibility before using.

Prepared By: Will Poe **Phone:** 01 (601) 630-8319

Supersedes MSDS Dated: New

Sources: (Sources and SDS format reference): This SDS conforms to the GHS (Globally Harmonised System), EC Regulation No. 1907/2006, Directive 67/548/EC, ANSI Z 400.1 16-Section Format, and complies with OSHA Hazard Communication Standard (HCS) 29 CFR 1910.1200.

Abbreviations

ACGIH (American Conference of Governmental Industrial Hygienists); ADR (EU Agreement concerning International Carriage of Dangerous Goods by Road); AICS (Australian Inventory of Chemical Substances); 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); CONEG (Coalition of Northeastern Governors – Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, & New York); CPR (Controlled Products Regulations); DIR (Directive); DMSO (Dimethyl Sulphoxide); DOL (Department of Labor); DOT (Department of Transportation); (Dangerous Substance Directive); DSL (Domestic Substance List); ECL (Existing Chemicals List); ECHA (European Chemicals Agency); EEC (European Economic Community Directives); EECDS (EC Dangerous Substances Classification, Packaging, and Labeling for R & S phrases); 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); ENCS (Existing & New Chemical Substances); EPA (Environmental Protection Agency); EPCRA (Emergency Planning & Community Right-To-Know Act of 1986); ERMA (Environmental Risk Management Authority); EU (European Union); FDA (Food & Drug Administration-USA); GHS (Global Harmonization System); HCS (Hazard Communication Standard); HFR (Health, Fire, Reactivity); HMIS (Hazardous Materials Identification System); IARC (International Agency for Research on Cancer); IATA (International Air Transport Association); ICAO (International Civil Aviation Organization); ILO (International Labor Organization); IMDG (International Maritime Dangerous Goods); IMO (International Maritime Organization); IP (Institute of Petroleum); IUCLID (International Uniform Chemical Information Database); KemI (Kemikalieninspektionen or Swedish Chemicals Agency); LC (Lethal Concentration 50% test organisms); LD (Lethal Dose 50% test organisms); LEL/LFL (Lower Explosive Limit / Lower Flammable Limit); LVP-VOC (Low Vapor Pressure Volatile Organic Compound); METI (Ministry of Economy, Trade and Industry); MSDS (Material Safety Data Sheet); MSHA (Mine Safety & Health Administration); NFPA (National Fire Protection Association); NIOSH (National Institute of Occupational Safety & Health); NITE (National Institute of Technology & Evaluation); NTP (National Toxicology Program); NZIoC (New Zealand Inventory of Chemicals); OEL (Occupational Exposure Limit); OSHA (Occupational Safety & Health Administration); Oil mist (liquid oil droplets suspended in air); PEL (Permissible Exposure Limit); PICCS (Philippines Inventory of Chemicals & Chemical Substances); Prop 65 (California Proposition 65); PMCC (Pensky-Martin Closed Cup); RCRA (Resource Conservation & Recovery Act); REACH (Registration, Evaluation, Authorization and Restriction of Chemicals); REL (Recommended Exposure Limits); RTK (Right-To-Know); RID (Regulations Concerning Carriage of Dangerous Goods by Rail); RoHS (Restriction of Hazardous Substances – Dir 2002/95/EC); R-Phrases (EU Risk Phrases); S-Phrases (EU Safety Phrases); SARA (Superfund Amendments & Reauthorization Act); SDS (Safety Data Sheet); TSCA (Toxic Substance Control Act); STEL (Short-Term Exposure Limit); STL (Short-Term Limit); TLV (Threshold Limit Value); STEL (Short-Term Exposure Limit); TSCA (Toxic Substances Control Act); TSL (Toxic Substance List); TLV (Threshold limit value); TWA (Time-Weighted Average); WHMIS (Workplace Hazardous Materials Information System-Canada); WEL (Workplace Exposure Limit); WGK (Wassergefährdungsklassen or German Water Hazard Class); IrL₅₀ (Inhibitory loading rate required to reduce algal growth rate by 50%); lbL₅₀ (Inhibitory loading rate required to reduce area under growth curve or biomass by 50%); ppm (parts per million); mg/m³ (milligrams per cubic meter); N (no); Y (yes)

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