

HYVOLT I

Date of Preparation: October 1, 2009

Section 1 - Identification of the Substance and Company

Product Name: HYVOLT I
Chemical Name: Distillates (Petroleum), severely hydrotreated light naphthenic/heavy paraffinic
Chemical Family: Petroleum Distillate
Chemical Formula: Not Applicable
CAS Number: 64742-53-6 / 64742-54-7
EINECS No.: 265-156-6 / 265-157-1
Use of substance: Electrical Insulating Oil
Industrial category: Petroleum
Other Designations: Electrical insulating oil, mineral oil, petroleum distillates, hydrotreated distillates
Manufacturer: Ergon Refining, Inc., P.O. Box 309, Vicksburg, MS 39181
Company Contacts: USA: Will Poe, Phone: 1-601-630-8319 email: will.poe@ergon.com

EMERGENCY TELEPHONE NUMBERS:

Ergon Refining, Inc. 1-601-638-4960 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.

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.

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

Ingredient Name	EC No.	CAS No.	% Vol.	Classification
Distillate, hydrotreated light naphthenic (Base Oil unspecified)	265-156-6	64742-53-6	80-95	Nonhazardous
Distillates, hydrotreated heavy paraffinic	265-157-1	64742-54-7	5-20	Nonhazardous

Severely hydrotreated naphthenic distillate is 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 C15 through C30 and produces finished oil with a viscosity near 10 cSt (mm²/s) @ 40°C.

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 water. 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 advise.

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.

Section 6 - Accidental Release Measures

Personal Precautions:

Spill /Leak Procedures: Stop spill at source if possible without risk. Contain spill. Eliminate sources of ignition. 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.

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. Take a shower after work if general contact occurs. Remove oil-soaked clothing and launder 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.

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	
Hydrotreated Light Naphthenic Distillate	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.
Hydrotreated Heavy Paraffinic Distillate	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.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear & bright

Color: Water white to pale

Odor: Mild Petroleum Odor

Odor Threshold: Not determined

Vapor Pressure: Not applicable

Vapor Density (Air=1): > 5

% Volatile: Nil LVP-VOC

Specific Gravity (H₂O=1): 0.883

Viscosity: near 10.0 cSt @ 40°C

Water Solubility: Nil

Boiling Point: 260-370°C

Pour Point: - 57°C

Evaporation Rate: Not available

pH: Not applicable

Molecular weight: 280

Flash point: ≥ 135°C PMCC (Typical 145°C)

Autoignition temperature: > 315 °C

Lower Explosive Level (LEL): Not determined

Upper Explosive Limit (UEL): Not determined

Section 10 - Stability and Reactivity

Conditions to Avoid: Sources of ignition.

Materials to Avoid / Chemical Incompatibilities: Strong Oxidizers

Hazardous Decomposition Products: Combustion products include carbon dioxide and carbon monoxide.

Polymerization: Polymerization will not occur.

Stability: Stable

Section 11- Toxicological Information

Acute Effects:

Acute Oral Toxicity: Tests on similar materials show a 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. 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.

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 to authorized disposal service

Section 14 - Transport Information

Land

ADR (Road) – Not classified

RID (Rail) – Not classified

DOT – Not classified

Sea

IMDG / IMO (Water) – Not classified

Air

ICAO / IATA (Air) – 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 good internationally.

REACH: This product is pre-registered with ECHA.

Labelling:

Hazard Label: None

Danger Symbol: None

Phrases: None

Restrictions on use: 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 Regulations:**CERCLA / SARA**

302/303/304 Categories: Extremely Hazardous Substances None

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

313 Categories: Toxic Chemicals (40 CFR 372) None

Clean Air Act: Hazardous Air Pollutants (HAPS) None

Ozone Depleting Compounds (ODC) None

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. 64742-53-6 / 64742-54-7

United States - State Regulatory Lists:

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. 265-156-6 / 265-157-1
 USA's TSCA CAS No. 64742-53-6 / 64742-54-7
 Korea's ECL No. KE-12552 / KE-12546
 Australia's AICS No. 64742-53-6 / 64742-54-7
 Canada's DSL No. 64742-53-6 / 64742-54-7
 Philippines' PICCS
 New Zealand's NzIoC (ERMA)
 Japan's MITI or NITE
 Sweden's KemI

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:** 1-601-630-8319
Date Prepared: June 22, 2009
Supersedes MSDS Dated: September 1, 2009 Changed date
 June 22, 2009 Updated company logo
 January 1, 2009 Developed GHS safety data sheet

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

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 (Wassergefährungsklassen 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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