

SAFETY DATA SHEET

Category 1

1. Identification

Product identifier HyVolt I Other means of identification None.

Recommended use Transformer Oil **Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Company: Ergon, Inc. Address: P.O. Box 1639

Jackson, MS 39215

E-mail: sds@ergon.com

Emergency Contacts

Customer Service: 1-800-222-7122

Chemtrec: 1-800-424-9300 After Business Hours (North America Only)

1-703-527-3887 After Business Hours (International)

2. Hazard(s) identification

Physical hazards Not classified. **Health hazards** Aspiration hazard

Environmental hazards Not classified. **OSHA** defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement May be fatal if swallowed and enters airways.

Precautionary statement

Prevention Do not breathe gas/mist/vapors/spray.

IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Response

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Distillates (petroleum), hydrotreated light naphthenic		64742-53-6	20 - 100
C18-C50 BRANCHED, CYCLIC AND LINEAR HYDROCARBONS – DISTILLATES		848301-69-9	0 - 50
Distillates (petroleum), hydrotreated light paraffinic		64742-55-8	0 - 40
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based		72623-86-0	0 - 40

Material name: HyVolt I SDS US 1 / 10

Chemical name	Common name and synonyms	CAS number	%
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based		72623-87-1	0 - 20
Distillates (petroleum), solvent-refined heavy naphthenic		64741-96-4	0 - 10
Distillates (petroleum), solvent-refined light paraffinic		64741-89-5	0 - 10

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

Not classified as a carcinogen. Meets EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP 346.

4. First-aid measures

Inhalation

Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. IF exposed or concerned: Get medical advice/attention.

Skin contact

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If skin irritation or an allergic skin reaction develops, get medical attention.

Eve contact

Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion

Do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Call a poison control center immediately.

Most important symptoms/effects, acute and delayed

Defatting of the skin. Droplets of the product aspirated into the lungs through ingestion or

vomiting may cause a serious chemical pneumonia.

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

General information Contact physician if discomfort continues. Keep victim under observation.

5. Fire-fighting measures

Suitable extinguishing media

Halon. Dry chemicals. Foam. Carbon dioxide (CO2). Water spray or fog. Do not use water jet as an extinguisher, as this will spread the fire.

Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

No unusual fire or explosion hazards noted.

Special protective equipment and precautions for firefighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

Fire fighting equipment/instructions Cool containers exposed to flames with water until well after the fire is out. Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Use pressurized air mask if product is involved in a

General fire hazards

No unusual fire or explosion hazards noted. Flammability Class: Combustible IIIB

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation.

Methods and materials for containment and cleaning up Large Spills: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth or absorbent material then place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS.

Material name: HyVolt I SDS US 2 / 10

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewer, basements or confined areas. Avoid discharge to the aquatic environment. Contact local authorities in case of spillage to drain/aquatic environment.

7. Handling and storage

Precautions for safe handling

DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands after handling and before eating. Do not get this material in contact with eyes. Avoid contact with skin. Avoid prolonged exposure. All handling to take place in well-ventilated area. Shower after work. Remove and wash contaminated clothing promptly.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Store in a well-ventilated place. Use care in handling/storage.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Components	Contaminants (29 CFR 19 Type	910.1000) Value	Form
C18-C50 BRANCHED, CYCLIC AND LINEAR HYDROCARBONS – DISTILLATES (CAS 848301-69-9)	PEL	400 mg/m3	
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	PEL	100 ppm 5 mg/m3	Mist.
		2000 mg/m3 500 ppm	
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	PEL	5 mg/m3	Mist.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	PEL	5 mg/m3	Mist.
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)	PEL	5 mg/m3	Mist.
US. ACGIH Threshold Limit Value Components	s Type	Value	Form
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	TWA	5 mg/m3	Inhalable fraction.
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)	TWA	5 mg/m3	Inhalable fraction.
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)	TWA	5 mg/m3	Inhalable fraction.

Material name: HyVolt I SDS US 3 / 10

4708 Version #: 13 Revision date: 05-05-2023 Issue date: 05-01-2014

US. NIOSH: Pocket Guide to Chemical Hazards			
Material	Туре	Value	Form
HyVolt I	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Components	Туре	Value	Form
C18-C50 BRANCHED, CYCLIC AND LINEAR HYDROCARBONS – DISTILLATES (CAS 848301-69-9)	TWA	400 mg/m3	
		100 ppm	
Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.
Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)	Ceiling	1800 mg/m3	
	STEL	10 mg/m3	Mist.
	TWA	350 mg/m3	
Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)	STEL	10 mg/m3	Mist.
	TWA	5 mg/m3	Mist.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined

occupational exposure limit is not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection Goggles/face shield are recommended.

Skin protection

Hand protection Chemical resistant gloves are recommended. If contact with forearms is likely wear gauntlet style

gloves.

Chemical/oil resistant clothing is recommended. Launder contaminated clothing before reuse. Other

When workers are facing concentrations above the exposure limit they must use appropriate **Respiratory protection**

certified respirators.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants.

Discard contaminated footwear that cannot be cleaned.

9. Physical and chemical properties

Appearance Clear & bright

Physical state Liquid. **Form** Liquid.

Color Water White to Pale Mild Petroleum Odor Odor **Odor threshold** Not determined. Not determined. pН

-77.8 °F (-61 °C) ASTM D5950/ISO 3016 Melting point/freezing point

Material name: HyVolt I SDS US 4 / 10 Initial boiling point and

boiling range

564.8 °F (296 °C) ISO 3924/ ASTM D2887

Flash point >= 275.0 °F (>= 135.0 °C) Pensky-Martens Closed Cup ASTM D93

Evaporation rateNot determined.Flammability (solid, gas)Not applicable.Upper/lower flammability or explosive limits

Explosive limit - lower

(%)

Not available.

Explosive limit - upper

(%)

Not available.

Vapor pressure Not determined.
Vapor density Not determined.

Relative density 0.88 (68 °F (20 °C) ISO 12185/ ASTM D4052)

Solubility(ies)

Solubility (water) Insoluble

Partition coefficient Not established.

(n-octanol/water)

Auto-ignition temperature > 599 °F (> 315 °C) ASTM E659

Decomposition temperature Not determined. **Viscosity** Not determined.

Other information

Kinematic viscosity 9.6 mm²/s ISO 3140 (104 °F (40 °C))

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable.

Possibility of hazardous

reactions

Hazardous polymerization does not occur.

Conditions to avoid Heat, flames and sparks. Avoid temperatures exceeding the flash point.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular

weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

Inhalation May be fatal if swallowed and enters airways.

Skin contact Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Eye contact May be irritating to eyes.

Ingestion May cause gastrointestinal discomfort if swallowed. Do not induce vomiting. Vomiting may

increase risk of product aspiration. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Defatting of the skin. Coughing. Shortness of breath. Discomfort in the chest.

Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

Components Species Test Results

Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)

<u>Acute</u> Dermal

LD50 Rat > 2000 mg/kg

Inhalation

LC50 Rat > 5000 mg/m³

Oral

LD50 Rat > 5000 mg/kg

Components **Species Test Results**

Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)

Acute

Dermal

LD50 Rat > 2000 mg/kg

Oral

LD50 Rat > 5000 mg/kg

Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)

Acute Dermal

LD50 Rabbit > 2000 mg/kg

Inhalation

LC50 Rat $> 5000 \text{ mg/m}^3$

Oral

LD50 Rat > 5000 mg/kg

Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)

Acute

Oral

LD50 Rat > 5000 mg/kg

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)

Acute

Dermal

LD50 Rat > 2000 mg/kg

Oral

LD50 > 5000 mg/kg Rat

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (CAS 72623-87-1)

Acute

Dermal

LD50 Rabbit > 2000 mg/kg

Oral

LD50 Rat > 5000 mg/kg

Skin corrosion/irritation May cause defatting of the skin, but is neither an irritant nor a sensitizer.

Serious eye damage/eye

irritation

Not classified. May cause minor irritation on eye contact.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization Not classified. May cause defatting of the skin, but is neither an irritant nor a sensitizer. Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Meets EU Carcinogenicity

requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC)

using IP 346.

IARC Monographs. Overall Evaluation of Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

US. National Toxicology Program (NTP) Report on Carcinogens

Distillates (petroleum), hydrotreated light naphthenic Known To Be Human Carcinogen.

(CAS 64742-53-6)

Lubricating oils (petroleum), C15-30, hydrotreated Known To Be Human Carcinogen.

neutral oil-based (CAS 72623-86-0)

Lubricating oils (petroleum), C20-50, hydrotreated Known To Be Human Carcinogen.

neutral oil-based (CAS 72623-87-1)

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Material name: HvVolt I SDS US 6 / 10 4708 Version #: 13 Revision date: 05-05-2023 Issue date: 05-01-2014

Specific target organ toxicity

- single exposure

Not classified.

Specific target organ toxicity

- repeated exposure

Not classified.

Aspiration hazard May be fatal if swallowed and enters airways.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

Further information Risk of chemical pneumonia after aspiration.

12. Ecological information

Ecotoxicity Based on available data, the classification criteria are not met for hazardous to the aquatic

environment.

Product		Species	Test Results
HyVolt I			
Aquatic			
Crustacea	EC50	Daphnia	18.75, 48 hours estimated
Fish	LC50	Fish	45, 96 hours estimated
Acute			
Crustacea	EC50	Daphnia	13.5, 48 hours estimated
Fish	LC50	Fish	44, 96 hours estimated
Components		Species	Test Results

C18-C50 BRANCHED, CYCLIC AND LINEAR HYDROCARBONS - DISTILLATES (CAS 848301-69-9)

Aquatic

Crustacea EC50 Water flea (Daphnia pulex) >= 2.7 - <= 5.1 mg/l, 48 hoursLC50 Rainbow trout, donaldson trout 8.8, 96 hours Fish (Oncorhynchus mykiss) 8.8, 96 hours Acute Crustacea EC50 Water flea (Daphnia pulex) >= 2.7 - <= 5.1 mg/l, 48 hoursFish LC50 Rainbow trout, donaldson trout 8.8, 96 hours (Oncorhynchus mykiss)

8.8, 96 hours

Not available. * Estimates for product may be based on additional component data not shown.

Persistence and degradability Expected to be inherently biodegradable.

Bioaccumulative potential Bioaccumulation is unlikely to be significant because of the low water solubility of this product.

Mobility in soil Expected to be slightly to moderately mobile in soil. Other adverse effects Oil spills are generally hazardous to the environment.

13. Disposal considerations

Disposal instructions Disposal recommendations are based on material as supplied. Disposal must be in accordance

with current applicable laws and regulations, and material characteristics at time of disposal.

Hazardous waste code Not applicable.

Waste from residues / unused products

Dispose of in accordance with local regulations. Avoid discharge into water courses or onto the

ground.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Offer rinsed packaging material to local recycling facilities.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

Material name: HyVolt I SDS US 7 / 10

4708 Version #: 13 Revision date: 05-05-2023 Issue date: 05-01-2014

IMDG

Not regulated as dangerous goods.

Annex II of MARPOL 73/78

Transport in bulk according to This product is a liquid. Therefore, bulk transport is governed by MARPOL 73/78, Annex I.

and the IBC Code

General information Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard,

29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

HyVolt oils are certified to be PCB-free. HyVolt oils are processed from naturally occurring raw

materials with no additives or recycled oils that might introduce PCB contamination.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

C18-C50 BRANCHED, CYCLIC AND LINEAR Listed.

HYDROCARBONS - DISTILLATES (CAS 848301-69-9)

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

Classified hazard

categories

Aspiration hazard

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

C18-C50 BRANCHED, CYCLIC AND LINEAR HYDROCARBONS - DISTILLATES (CAS 848301-69-9)

Distillates (petroleum), hydrotreated light naphthenic (CAS 64742-53-6)

Distillates (petroleum), hydrotreated light paraffinic (CAS 64742-55-8)

Distillates (petroleum), solvent-refined heavy naphthenic (CAS 64741-96-4)

Distillates (petroleum), solvent-refined light paraffinic (CAS 64741-89-5)

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (CAS 72623-86-0)

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (CAS 72623-87-1)

International Inventories

Country(s) or region On inventory (yes/no)* **Inventory name**

Australia Australian Inventory of Industrial Chemicals (AICIS) Yes

SDS US Material name: HyVolt I 8 / 10

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information, including date of preparation or last revision

Issue date 05-01-2014 **Revision date** 05-05-2023

Version # 13

Further information CHEMTREC Korea: 003-0813-2549 Local CHEMTREC Numbers:

CHEMTREC Mexico: 1-800-681-9531

NFPA ratings Health: 1

Flammability: 1 Instability: 0

List of abbreviations vPvB: very Persistent, very Bioaccumulative.

PBT: Persistent, bioaccumulative, toxic.

CEN: European Committee for Standardization (Comité Européen de Normalisation).

TWA: Time Weighted Average. STEL: Short-term Exposure Limit. TLV: Threshold Limit Value.

References **ACGTH**

EPA: AQUIRE database

NLM: Hazardous Substances Data Base

US. IARC Monographs on Occupational Exposures to Chemical Agents

IARC Monographs. Overall Evaluation of Carcinogenicity National Toxicology Program (NTP) Report on Carcinogens

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

Chemical Abstracts Service Registry Handbook CRC: Handbook of Chemistry and Physics

ILO Safety Cards

International Labour Organization

International Maritime Organization Marine Pollutants List

NFPA Hazardous Chemical Data Sheets

NIOSH Pocket Guide

Registry of Toxic Effects of Chemical Substances (RTECS)

US DOT Hazardous Materials Regulations

Chemical safety report. Korea. Dangerous Substances Threshold Quantity (Presidential Decree of

Dangerous Substances Safety Management Act No. 18406, Schedule 1)

Korea. Harmful Substances Prohibited from Manufacturing (Presidential Decree on the Industrial

Safety and Health Act (No. 13053), Article 29)

Korea. OELs. Regulation for Permitted Concentration of Hazardous Substances (Ministry of Labor

(MOL) Public Notice No. 1986-45, as amended)

Korea. Regulated volatile organic compounds (VOCs) (MOE Notice No. 2001-36, March 8, 2001,

as amended)

Material name: HyVolt I SDS US 9 / 10

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.

Material name: HyVolt I SDS US