



**1. Identification of the substance/mixture and of the company**

**1.1. Product identifier**

**Product Identity** Renkert Oil Voltro™ I and Voltro™ II  
**Alternate Names** Transformer oil

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

**Intended use** Electrical Insulating oil  
**Application Method** Transformer fill

**1.3. Details of the supplier of the safety data sheet**

**Company Name** Renkert Oil  
3817 Main Street  
Morgantown, PA 19543

**Emergency**  
**CHEMTREC (USA)** (800) 424-9300  
**24 hour Emergency Telephone No.** or 1 703 527 3887  
**Customer Service: Renkert Oil** Product Information: +1 (610) 286-8012  
Email: orders@renkertoil.com  
SDS Info: mproudfoot@renkertoil.com

**2. Hazard identification of the product**

**2.1. Classification of the substance or mixture**

H304 – Aspiration Hazard – Category 1 Other Hazards: none known

**2.2. Label elements**



**DANGER**

May be fatal if swallowed and enters airways  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician; Do NOT induce vomiting; Dispose of contents/container to approved disposal facility

**[Prevention]:**  
No GHS prevention statements  
**[Storage]:**  
No GHS storage statements

**[Response]:**  
No GHS response statements  
**[Disposal]:**  
No GHS disposal statements

### 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Distillates (Petroleum) Hydrotreated Light Paraffinic CAS Number: 64742-55-8	0-100%		[1]
Mineral Oil, Petroleum Distillates, Hydrotreated Light Naphthenic CAS Number: 64742-53-6	0-100%		[1]
Antioxidant: Butylated hydroxytoluene (BHT) CAS Number: 128-37-0	<0.3%		

[1] Substance classified with a health or environmental hazard.

### 4. First aid measures

#### 4.1. Description of first aid measures

<b>General</b>	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
<b>Inhalation</b>	Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.
<b>Eyes</b>	Immediately flush the eyes with large amounts of water for at least 15 minutes, alternately lifting the upper and lower eyelids. After 5 minutes, if appropriate, remove contact lenses and continue flushing the eyes for an additional 15 minutes. Not expected to cause prolonged or significant eye irritation.
<b>Skin</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. Contact with the skin is not expected to cause prolonged or significant irritation. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.
<b>Ingestion</b>	Material may be harmful or fatal if swallowed. Ingestion may lead to vomiting and aspiration (breathing) of vomitus into the lungs must be avoided as even small quantities may result in aspiration pneumonitis. Generally considered to have a low order of acute toxicity.

#### 4.2. Most important symptoms and effects, both acute and delayed

<b>Overview</b>	<p><b>Most important symptoms and effects, both acute and delayed:</b> Inhalation of oil mists or vapors generated at elevated temperatures may cause respiratory irritation. Accidental ingestion can result in minor irritation of the digestive tract, nausea and diarrhea.</p> <p><b>Notes to Physician:</b> Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.</p>
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## 5. Fire-fighting measures

**NFPA 704 Hazard Class**

**Health: 0 Flammability: 1 Instability: 0**



0 (Minimal)  
1 (Slight)  
2 (Moderate)  
3 (Serious)  
4 (Severe)

### 5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, powder, water spray.  
Do not use; water jet.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide and unidentified organic compounds will be evolved when this material undergoes combustion

### 5.3. Advice for fire-fighters

Firefighting personnel should respond with appropriate protective clothing, firefighting gear, and breathing equipment as trained. All other personnel should exit the area and proceed to a gathering point in an area unaffected by the fire and smoke.

See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

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## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

### 6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

### 6.3. Methods and material for containment and cleaning up

**Protective Measures:** Eliminate all sources of ignition in vicinity of spilled material.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities as appropriate or required.

**7. Handling and storage**

**7.1. Precautions for safe handling**

Keep away from flames and hot surfaces. Use good personal hygiene practices and wear appropriate personal protective equipment. Spills will produce very slippery surfaces.

**7.2. Conditions for safe storage, including any incompatibilities**

Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

Incompatible materials: Strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**8. Exposure controls and personal protection**

**8.1. Control parameters**

**Exposure**

CAS No.	Ingredient	Source	Value
64742-55-8	Distillates (Petroleum) Hydrotreated Light Paraffinic	OSHA	exposure limits for oil mist are 5 mg/m3
		ACGIH	5 mg/m3 TWA inhalable fraction
		NIOSH	10 mg/m3 STEL ,mist
64742-53-6	Mineral Oil, Petroleum Distillates, Hydrotreated Light Naphthenic	OSHA	exposure limits for oil mist are 5 mg/m3
		ACGIH	5 mg/m3 TWA inhalable fraction
128-37-0	2,6 Di-Tert-Butyl-P-Cresol (BHT)	ACGIH	2 mg/m3 TWA inhalable fraction and vapor
		NIOSH	10 mg/m3 TWA

Contains mineral oil. The exposure limits for oil mist are 5 mg/m3 OSHA PEL and 10 mg/m3 ACGIH.



**Carcinogenic parameters**

CAS No.	Ingredient	Source	Value
64742-55-8	Distillates (Petroleum) Hydrotreated Light Paraffinic	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
64742-53-6	Mineral Oil, Petroleum Distillates, Hydrotreated Light Naphthenic	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
128-37-0	2,6 Di-Tert-Butyl-P-Cresol (BHT)	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No

**8.2. Exposure controls**

**Respiratory**

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

**Eyes**

No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin**

Wear overalls to keep skin contact to a minimum. Nitrile rubber gloves should be worn.

**Engineering Controls**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

**Other Work Practices**

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

## 9. Physical and chemical properties

<b>Appearance</b>	Colorless Liquid
<b>Odor</b>	Petroleum Odor
<b>Odor threshold</b>	Not Measured
<b>pH</b>	Not Applicable
<b>Pour point</b>	-40C (-40F) max
<b>Initial boiling point and boiling range</b>	> 260 C (500 F)
<b>Flash Point</b>	293 F (145 C) minimum (Cleveland Open Cup)
<b>Evaporation rate (Ether = 1)</b>	Not Measured
<b>Flammability (solid, gas)</b>	Not Applicable
<b>Upper/lower flammability or explosive limits</b>	<b>Lower Explosive Limit:</b> Not Measured <b>Upper Explosive Limit:</b> Not Measured
<b>Vapor pressure (Pa)</b>	< 0.01 mmHg @ 37.8 C (100 F)
<b>Vapor Density</b>	> 1
<b>Specific Gravity</b>	0.855 - 0.895 @ 15.6 C (60.1F) / 15.6 C (60.1 F)
<b>Solubility in Water</b>	Soluble in hydrocarbon solvents, insoluble in water.
<b>Partition coefficient n-octanol/water (Log Kow)</b>	Not Measured
<b>Auto-ignition temperature</b>	Not Measured
<b>Decomposition temperature</b>	Not Measured
<b>Viscosity (cSt)</b>	9-11 cSt @ 40 C (104 F)

## 10. Stability and reactivity

### 10.1. Reactivity

Hazardous Polymerization will not occur.

### 10.2. Chemical stability

Stable under normal circumstances.

### 10.3. Possibility of hazardous reactions

None known (none expected).

### 10.4. Conditions to avoid

Extended exposure to high temperatures can cause decomposition. Avoid all possible sources of ignition.

### 10.5. Incompatible materials

Strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

### 10.6. Hazardous decomposition products

Not anticipated under conditions of normal use.

## 11. Toxicological information

### Acute toxicity

Ingredient	Oral LD50, g/kg	Skin LD50, g/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LD50, g/L/4hr	Inhalation Gas LD50, ppm
Distillates (Petroleum) Hydrotreated Light Paraffinic	>5 Rat - Category: 5	>2g/kg Category: 4	No data available	>5 Rat - Category: 5	No data available
Mineral Oil, Petroleum Distillates, Hydrotreated Light Naphthenic	>5 Rat - Category: 5	>2g/kg Category: 4	>2g/kg Category: 4	No data available	No data available
2,6 Di-Tert-Butyl-P-Cresol (BHT)	>10 Guinea Pig Category: 5				

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	---	Not Applicable
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Classified
Skin sensitization	---	Not Classified
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Classified
STOT-repeated exposure	---	Not Classified
Aspiration hazard	Category 1	May be fatal if swallowed and enters airways



## 12. Ecological information

**GHS Classification:** No classified hazards

### 12.1. Toxicity

#### ECOTOXICITY

All acute aquatic toxicity studies on samples of similar oils show acute toxicity values greater than 100mg/l for invertebrates, algae and fish. These tests were carried out on water accommodated fractions and the results are consistent with predicted aquatic toxicity of these substances based on their hydrocarbon compositions. Not classified hazards.

**ENVIRONMENTAL FATE** This material is considered inherently biodegradable. This material is not expected to present any environmental problems other than those associated with oil spills. This material is not readily biodegradable. See Section 6 for Accidental Release Measures.

#### Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Valtro™ I or Valtro™ II mixture	5,000, <i>Oncorhynchus mykiss</i>	>800 <i>Daphnia magna</i>	Not Available
BHT		1.44 <i>Daphnia Pulex</i>	

### 12.2. Persistence and degradability

Persistence per IOPC Fund definition: persistent

### 12.3. Bioaccumulative potential

Not Measured

### 12.4. Mobility in soil

No data available.

**12.5. Results of PBT and vPvB assessment (persistent, bioaccumulative and toxic, very persistent, very bioaccumulative)** This product contains no PBT/vPvB chemicals.

### 12.6. Other adverse effects

None expected

## 13. Disposal considerations

### 13.1. Waste treatment methods

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods. (See B.C. Reg. GY/92 Waste Management Act; R.R.O. 1990, Reg. 347 General-Waste Management; C.C.S.M.c. W40 The Waste Reduction and Prevention Act; N.S. Reg. 51/95 and N.S. Reg. 179/96 for examples of Provincial legislation.)



### 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
<b>14.1. UN number</b>	Not Applicable		
<b>14.2. UN proper shipping name</b>	PETROLEUM OIL, N.O.I.B.N., NOT REGULATED AS A HAZARDOUS MATERIAL	Not Regulated	Not Regulated
<b>14.3. Transport hazard class(es)</b>	<b>DOT Hazard Class:</b> Not Applicable <b>DOT Label:</b> ---	<b>IMDG:</b> Not Applicable <b>Sub Class:</b> Not Applicable	<b>Air Class:</b> Not Applicable
<b>14.4. Packing group</b>	Not Applicable	Not Applicable	Not Applicable
<b>14.5. Environmental hazards</b>			
<b>IMDG</b>	Marine Pollutant: No		
<b>14.6. Special precautions for user</b>	No further information		

### 15. Regulatory information

<b>Regulatory Overview</b>	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.		
<b>Toxic Substance Control Act ( TSCA)</b>	All components of this material are either listed or exempt from listing on the TSCA Inventory.		
<b>WHMIS Classification</b>	Not Regulated		
<b>US EPA Tier II Hazards</b>	<b>Fire: No</b>	<b>Reactive: No</b>	
	<b>Sudden Release of Pressure: No</b>		
	<b>Delayed (Chronic): No</b>	<b>Immediate (Acute):No</b>	
<b>EPCRA 311/312 Chemicals and RQs:</b>	(No Product Ingredients Listed)		
<b>EPCRA 302 Extremely Hazardous :</b>	(No Product Ingredients Listed)		
<b>EPCRA 313 Toxic Chemicals:</b>	(No Product Ingredients Listed)		
<b>Proposition 65 - Carcinogens (&gt;0.0%):</b>	(No Product Ingredients Listed)		
<b>Proposition 65 - Developmental Toxins (&gt;0.0%):</b>	(No Product Ingredients Listed)		
<b>Proposition 65 - Female Repro Toxins (&gt;0.0%):</b>	(No Product Ingredients Listed)		
<b>Proposition 65 - Male Repro Toxins (&gt;0.0%):</b>	(No Product Ingredients Listed)		
<b>N.J. RTK Substances (&gt;1%) :</b>	(No Product Ingredients Listed)		
<b>Penn RTK Substances (&gt;1%) :</b>	(No Product Ingredients Listed)		

**National Chemical Inventories**

Chemical name	AICS	DSL	CHINA	EINCS	ENCS	KOREA	PICCS	TSCA	New Zealand
Distillates (petroleum), hydrotreated heavy paraffinic - (64742-54-7)	X	X	X	X	X	X	X	X	X
Mineral Oil, Petroleum Distillates, Hydrotreated Light Naphthenic	X	X	X	X	X	X	X	X	X



## 16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

The data on this SDS relates only to the specific material described and does not relate to its use in combination with other materials or in any process

**This is the second version in the GHS SDS format. Added information on Naphthenic base stock.**

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