

Prepared according to 29CFR 1910.1200.

1	Chemical Product and Company Identification
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Product Trade Name	VILTER D
CAS Number	Confidential.
Synonyms	None.
Generic Chemical Name	Mineral oil
Product Type	Not applicable.
Preparation/Revision Date	25 May 2012
Transportation Emergency Phone No.	FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)
MSDS No.	11658890-2123125-4023221-102103

2	Hazards Identification
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Appearance	Water white to light straw liquid.
Odor	Odorless
Principal Hazards	<ul style="list-style-type: none"> This material has no known health hazards.

See Section 11 for complete health hazard information.

3	Composition/Information on Ingredients
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Hazardous Ingredients	This material has no known hazards under applicable laws.
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4	First Aid Measures
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Eyes	Flush with water at least 30 minutes. Get medical attention if eye irritation develops or persists.
Skin	Wash with soap and water. Get medical attention if irritation develops. Launder contaminated clothing before reuse.
Inhalation	Remove exposed person to fresh air if adverse effects are observed.
Oral	DO NOT INDUCE VOMITING. Get immediate medical attention.
Additional Information	High pressure injection of oil through the skin is a medical emergency. There may be no sign of injury and no initial pain. Prompt debridement of the wound by a physician is necessary to minimize necrosis and tissue loss.

5	Fire Fighting Measures
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Flash Point	≥ 177 °C, 350.6 °F COC (Minimum)
Extinguishing Media	CO2, dry chemical, or foam. Water can be used to cool and protect exposed material.
Firefighting Procedures	Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Water or foam may cause frothing. Avoid solid streams of water. Use water spray. Use water to cool containers exposed to fire.
Unusual Fire & Explosion Hazards	When heated above the flash point, releases flammable vapors which when mixed with air and exposed to an ignition source can burn or explode if confined. See section 10 for additional information.

6	Accidental Release Measures
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Spill Procedures

Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Ventilate area if spilled in confined space or other poorly ventilated areas. Prevent entry into sewers and waterways. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

7	Handling and Storage
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Pumping Temperature	Not determined.
Maximum Handling Temperature	Not determined.
Handling Procedures	Keep material away from heat, sparks, pilot lights, static electricity and open flame. Use with adequate ventilation. Keep containers closed when not in use. Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Avoid skin contact. Wash thoroughly after handling. Launder contaminated clothing before reuse. Empty containers retain material residue. Do not cut, weld, braze, solder, drill, grind or expose containers to heat, flame, spark or other sources of ignition. Do not eat, drink or smoke when using this product. Dispose of packaging or containers in accordance with local, regional, national and international regulations.
Maximum Storage Temperature	Not determined.
Storage Procedures	See section 10 for incompatible materials.
Maximum Loading Temperature	Not determined.

8	Exposure Controls/Personal Protection
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Exposure Limits	None established
Other Exposure Limits	Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH TWA of 5 mg per cubic meter.
Engineering Controls	If use generates a mist or vapor, local exhaust ventilation is recommended.
Gloves Procedures	The effectiveness of the following fabrics to prevent contact with this material is dependent upon the extent of contact and the conditions under which the glove is used. Polyvinyl chloride. Polyvinyl alcohol. Viton. Nitrile. Neoprene.
Eye Protection	Safety Glasses.
Respiratory Protection	Use NIOSH/MSHA approved respirator with a combination organic vapor and high efficiency filter cartridge if recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.
Clothing Recommendation	Long sleeve shirt is recommended. Launder contaminated clothing before reuse.

9	Physical and Chemical Properties
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Flash Point	≥ 177 °C, 350.6 °F COC (Minimum)
Upper Flammable Limit	Not determined.
Lower Flammable Limit	Not determined.
Autoignition Point	343.33 °C, 650 °F
Explosion Data	Material does not have explosive properties.
Vapor Pressure	< 0.0001 mm Hg (20 °C)
pH	Not determined.
Specific Gravity	0.91 (15.6 °C)
Bulk Density	Not determined.
Water Solubility	Insoluble.
Percent Solid	Not determined.
Percent Volatile	Not determined.
Volatile Organic Compound	Not determined.
Vapor Density	> 5 Air=1
Evaporation Rate	Not determined.
Odor	Odorless
Appearance	Water white to light straw liquid.
Viscosity	Not determined.
Odor Threshold	Not determined.
Boiling Point	> 274 °C, > 525.2 °F(Typical)
Pour Point Temperature	Not determined.
Melting / Freezing Point	Not determined.

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.

10	Stability and Reactivity
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Stability	Material is normally stable at moderately elevated temperatures and pressures.
Decomposition Temperature	Not determined.
Incompatibility	Strong oxidizing agents. Strong oxidants such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium

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Polymerization	hypochlorite, etc., present a serious explosion hazard.
Thermal Decomposition	Will not occur.
Conditions to Avoid	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Not determined.

11	Toxicological Information
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– ACUTE EXPOSURE –

Eye Irritation	Not expected to cause eye irritation. Based on data from components or similar materials.
Skin Irritation	Not expected to be a primary skin irritant. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin. Material may aggravate an existing dermatitis.
Respiratory Irritation	If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract. Based on data from components or similar materials.
Dermal Toxicity	The LD50 in rabbits is > 2000 mg/Kg. Based on data from similar materials.
Inhalation Toxicity	No data available to indicate product or components may be a toxic inhalation hazard.
Oral Toxicity	The LD50 in rats is > 5000 mg/Kg. Based on data from similar materials. Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in severe injury to the lungs and death.
Dermal Sensitization	Not expected to cause skin sensitization. Based on data from components or similar materials.
Inhalation Sensitization	No data available to indicate product or components may be respiratory sensitizers.

– CHRONIC EXPOSURE –

Chronic Toxicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Carcinogenicity	This mineral oil is considered to be severely refined and not considered to be carcinogenic under IARC.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive Toxicity	No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
Teratogenicity	No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

– ADDITIONAL INFORMATION –

Other	No other health hazards known.
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12	Ecological Information
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– ENVIRONMENTAL TOXICITY –

Freshwater Fish Toxicity	The acute LC50 is > 1000 mg/L based on similar materials.
Freshwater Invertebrates Toxicity	The acute EC50 is 100 - 1000 mg/L based on similar materials.
Algal Inhibition	Not determined.
Saltwater Fish Toxicity	Not determined.
Saltwater Invertebrates Toxicity	Not determined.
Bacteria Toxicity	Not determined.
Miscellaneous Toxicity	Not determined.

– ENVIRONMENTAL FATE –

Biodegradation	This product will biodegrade moderately based on OECD 301-type test data for similar products.
Bioaccumulation	There is no data available to evaluate this material for bioconcentration.
Soil Mobility	Not determined.

13	Disposal Considerations
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Waste Disposal	This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.
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14	Transport Information
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ICAO/IATA I	Not regulated.
ICAO/IATA II	Not regulated.
IMDG	Not regulated.
IMDG EMS Fire	Not applicable.
IMDG EMS Spill	Not applicable.
IMDG MFAG	Not applicable.
MARPOL Annex II	Not determined.
USCG Compatibility	Not determined.

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U.S. DOT Bulk	Not regulated.
DOT NAERG	Not applicable.
U.S. DOT (Intermediate)	Not regulated.
U.S. DOT Intermediate NAERG	Not applicable.
U.S. DOT Non-Bulk	Not regulated.
U.S. DOT Non-Bulk NAERG	Not applicable.
Canada	Not regulated.
Mexico	Not regulated.
Bulk Quantity	85000 KG, 187391 lbs.
Intermediate Quantity	11000 KG, 24251 lbs.
Non-Bulk Quantity	400 KG, 882 lbs.

Review classification requirements before shipping materials at elevated temperatures.

15	Regulatory Information
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-- Global Chemical Inventories --

USA All components of this material are on the US TSCA Inventory or are exempt.

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Substances List.

Switzerland All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
Korea All components are in compliance in Korea.
Philippines All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
China All components of this product are listed on the Inventory of Existing Chemical Substances in China.
Taiwan May require notification before sale in Taiwan.

-- Other U.S. Federal Regulations --

SARA Ext. Haz. Subst. This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.

SARA Section 313 This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.

SARA 311 Classifications

Acute Hazard	No
Chronic Hazard	No
Fire Hazard	No
Reactivity Hazard	No

CERCLA Hazardous Substances None known.

-- State Regulations --

Cal. Prop. 65 This product does not intentionally contain any chemicals known by the State of California to cause cancer and/or birth defects. Moreover, we do not routinely analyze its products for impurities which may be such chemicals.

-- Product Registrations --

U.S. Fuel Registration Not applicable.
Finnish Registration Number Not Registered
Swedish Registration Number Not Registered
Norwegian Registration Number Not Registered
Danish Registration Number Not Registered
Swiss Registration Number Not Registered
Italian Registration Number Not Registered

-- Other / International --

Miscellaneous Regulatory Information Not determined.

16	Other Information
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US NFPA Codes

	Health	Fire	Reactivity	Special
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0	1	0	NE
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(N/E) - None established

HMIS Codes

Health	Fire	Reactivity
0	1	0

Precautionary Labels

- This material has no known health hazards.

Revision Indicators

Section: 5 Flash point.

Changed: 25 May 2012

Section: 9 Flash point.

Changed: 25 May 2012

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