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Safety Data Sheet

I. PRODUCT AND COMPANY IDENTIFICATION

Product Name: FVP DOT 3 BF 4/1GL
Product Code: FV20BF4P
Emergency Phone: (800) 424-9300 (202) 483-7616 (CHEMTREC)
Poison Control Center: (800) 222-1222
Company: Warren Distribution, Inc.
727 S. 13th St.
Omaha, NE 68102
Information Phone: (800) 825-1235 (402) 341-9397
Revision Number: 19

II. HAZARDS IDENTIFICATION

Routes of Entry: Inhalation, Absorption, Ingestion, Skin contact, Eye contact
Chemical Interactions: None known.
Conditions Aggravated by Exposure: No data found.

Acute Health Effects:

Inhalation Irritation: Can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea, and headache.
Skin Contact: No hazard in normal industrial use. Non-irritating to the skin.
Skin Absorption: No absorption hazard in normal industrial use.
Eye Contact: Can cause minor irritation, tearing and reddening. Can cause slight irritation.
Ingestion Irritation: Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea. May cause vomiting.

Chronic Health Effects:

Carcinogenicity: See section 15. Material did not cause cancer in long-term animal studies.
Reproductive Toxicity: No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Mutagenicity: No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.

HMIS Ratings:

Health: 2
Fire: 1
Reactivity: 0
PPE: B

NFPA Ratings:

Health: 2
Fire: 1
Reactivity: 0

KEY: 0 - Least 1 - Slight 2 - Moderate 3 - High 4 - Extreme



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III. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	%	CAS #	OSHA Exposure Limits
Ethanol, 2-(2-(2-butoxyethoxy)ethoxy)-	10 - 30	143-22-6	No PEL
Diethylene glycol	10 - 30	111-46-6	No PEL
Ethanol, 2-(2-(2-ethoxyethoxy)ethoxy)-	10 - 30	112-50-5	No PEL
Tetraethylene glycol monobutyl ether	7 - 13	1559-34-8	No PEL
Tetraethylene glycol	5 - 10	112-60-7	No PEL
Ethanol, 2-(2-(2-methoxyethoxy)ethoxy)-	1 - 5	112-35-6	No PEL
Ethanol, 2-(2-butoxyethoxy)-	1 - 5	112-34-5	No PEL
Polyethylene glycol methyl ether	1 - 5	9004-74-4	No PEL
Pentaethylene glycol monobutyl ether	1 - 5	23601-39-0	No PEL
Diethylene glycol monoethyl ether	1 - 5	111-90-0	No PEL

Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 (Hazard Communication Standard).

IV. FIRST-AID MEASURES

Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen.
Eyes:	Flush with water. If irritation occurs, get medical attention. Rest eyes for 30 minutes. If redness, burning, blurred vision, or swelling occurs, transport to nearest medical facility for additional treatment.
Skin Contact:	Wash with soap and water.
Ingestion:	Do not induce vomiting and seek medical attention immediately. Provide medical care provider with this MSDS.
Notes to Doctor:	No additional first aid information available.

V. FIRE FIGHTING MEASURES

Flammability	Combustible at elevated temperatures
Summary:	
Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a stream of water into the hot burning liquid.
Fire and/or Explosion Hazards:	Material may be ignited only if preheated to temperatures above the high flash point, for example in a fire.
Fire Fighting Methods and Protection:	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Use methods for the surrounding fire.
Hazardous Combustion Products:	Carbon monoxide, Carbon dioxide, Nitrogen containing gases
Flash Point:	121 °C (250 °F)
Autoignition Temperature:	310



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VI. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment:	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this MSDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.
Methods for Clean-up:	Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Dispose of in regular trash as product is not considered a hazardous waste. Used fluid should be disposed of at a recycling center. Do not flush to sewer.

VII. HANDLING AND STORAGE

Handling Precautions:	Mildly irritating material. Avoid unnecessary exposure. Do not get in eyes, on skin and clothing. Wash thoroughly after handling. Avoid breathing material.
Storage Conditions:	Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Do not expose to extreme temperatures or flames.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	No exposure limits exist for the constituents of this product. Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort. General room or local exhaust ventilation is usually required to meet employee exposure standards and/or to ensure employees are not overexposed to airborne material as described in Section III.
Respiratory Protection:	Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. Wear a NIOSH approved respirator if levels above the exposure limits are possible.
Respirator Type(s):	None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.
Eye Protection:	Wear safety glasses when handling this product if there is a likelihood of contact with eyes.
Skin Protection:	Not normally considered a skin hazard. Where use can result in skin contact, practice good personal hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.
Gloves:	Butyl rubber, Natural latex,, Polyvinyl chloride

Control Parameters:

Chemical Name	ACGIH TLV-TWA	ACGIH IDLH STEL	OSHA STEL
Ethanol, 2-(2-(2-butoxyethoxy)ethoxy)-	No TLV	No STL No IDLH	No STEL
Diethylene glycol	No TLV	No STL No IDLH	No STEL
Ethanol, 2-(2-(2-ethoxyethoxy)ethoxy)-	No TLV	No STL No IDLH	No STEL
Tetraethylene glycol monobutyl ether	No TLV	No STL No IDLH	No STEL



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Tetraethylene glycol	No TLV	No STL	No IDLH	No STEL
Ethanol, 2-(2-(2-methoxyethoxy)ethoxy)-	No TLV	No STL	No IDLH	No STEL
Ethanol, 2-(2-butoxyethoxy)-	No TLV	No STL	No IDLH	No STEL
Polyethylene glycol methyl ether	No TLV	No STL	No IDLH	No STEL
Pentaethylene glycol monobutyl ether	No TLV	No STL	No IDLH	No STEL
Diethylene glycol monoethyl ether	No TLV	No STL	No IDLH	No STEL

IX. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Colorless to pale yellow
Odor:	Strong
Solubility in Water:	Complete; 100%
Evaporation Rate:	No data.
Vapor Pressure:	No data.
Boiling Point (°C):	232
Freezing Point (°C):	-50
Specific Gravity:	1.05
Density:	8.76
Flash Point (°C):	121
Flash Point Method:	ASTM D 93
Upper Flammability	Unknown
Limit, % in air:	
Lower Flammability	Unknown
Limit, % in air:	

X. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Conditions to Avoid:	Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition. Dried product residue (can act as an oxidizer). Impact or high temperatures can cause decomposition
Materials to Avoid:	Strong acids, Strong oxidizing agents
Hazardous Decomp.	Aldehydes
Products:	
Hazardous	Will not occur.
Polymerization:	

XI. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion:	Although this product has a low order of acute oral toxicity, aspiration of minute amounts into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury and possibly death.
Inhalation:	At room temperature, exposure to vapor is minimal due to low volatility.
Absorption:	No absorption hazard in normal industrial use.
Eyes (Draize score):	No data.
Skin (Draize score):	No data.

Component Toxicology Data (NIOSH):

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Chemical Name	CAS #	LD ₅₀ /LC ₅₀
Ethanol, 2-(2-(2-butoxyethoxy)ethoxy)-	143-22-6	Oral LD50 Rat 5300 mg/kg; Dermal LD50 Rabbit 3480 mg/kg
Diethylene glycol	111-46-6	Oral LD50 Rat 12565 mg/kg; Dermal LD50 Rabbit 11890 mg/kg
Ethanol, 2-(2-(2-ethoxyethoxy)ethoxy)-	112-50-5	Oral LD50 Rat 7750 mg/kg; Dermal LD50 Rabbit 8 mL/kg
3,6,9,12-Tetraoxahexadecan-1-ol	1559-34-8	Oral LD50 Rat 5175 mg/kg; Dermal LD50 Rat >4000 mg/kg
Tetraethylene glycol	112-60-7	Oral LD50 Rat 28900 µL/kg; Dermal LD50 Rabbit 22570 mg/kg
Ethanol, 2-(2-(2-methoxyethoxy)ethoxy)-	112-35-6	Oral LD50 Rat 11300 µL/kg; Dermal LD50 Rabbit 7100 µL/kg
Ethanol, 2-(2-butoxyethoxy)-	112-34-5	Oral LD50 Rat 3384 mg/kg; Dermal LD50 Rabbit 2700 mg/kg
Polyethylene glycol methyl ether	9004-74-4	Oral LD50 Rat 39800 µL/kg; Dermal LD50 Rabbit >20 mL/kg
Ethanol, 2-(2-ethoxyethoxy)-	111-90-0	Oral LD50 Rat 1920 mg/kg; Dermal LD50 Rabbit 4200 µL/kg; Dermal LD50 Rat 6 mL/kg; Inhalation LC50 Rat >5240 mg/m ³ 4 h

XII. ECOLOGICAL INFORMATION

Overview:	This material is not expected to be harmful to the ecology.
Mobility:	This material is expected to have only slight mobility in soil. It absorbs strongly to most soil types.
Persistence:	Biodegradation, adsorption to sediment, and bioconcentration to aquatic organisms should not be significant.
Bioconcentration:	Bioconcentration is not expected to occur.
Degradability:	No data.

Toxicity to Aquatic Invertebrates:	CAS #	Results
Triethylene glycol monobutyl ether	143-22-6	48 Hr EC50 Daphnia magna: >500 mg/L
Diethylene glycol	111-46-6	48 Hr EC50 Daphnia magna: 84000 mg/L
3,6,9,12-Tetraoxahexadecan-1-ol	1559-34-8	48 Hr EC50 Daphnia magna: >1000 mg/L
Tetraethylene glycol	112-60-7	48 Hr EC50 Daphnia magna: >1000 mg/L
Triethylene glycol monomethyl ether	112-35-6	48 Hr EC50 Daphnia magna: >500 mg/L
Diethylene glycol monobutyl ether	112-34-5	24 Hr EC50 Daphnia magna: 2850 mg/L; 48 Hr EC50 Daphnia magna: >100 mg/L
Diethylene glycol monoethyl ether	111-90-0	48 Hr EC50 Daphnia magna: 3940 - 4670 mg/L
Triethylene glycol monobutyl ether	143-22-6	72 Hr EC50 Desmodesmus subspicatus: >500 mg/L
3,6,9,12-Tetraoxahexadecan-1-ol	1559-34-8	96 Hr EC50 Pseudokirchneriella subcapitata: >1000 mg/L
Tetraethylene glycol	112-60-7	96 Hr EC50 Pseudokirchneriella subcapitata: >1000 mg/L
Triethylene glycol monomethyl ether	112-35-6	72 Hr EC50 Desmodesmus subspicatus: >500 mg/L
Diethylene glycol monobutyl ether	112-34-5	96 Hr EC50 Desmodesmus subspicatus: >100 mg/L
Toxicity to Fish:	CAS #	Results
Triethylene glycol monobutyl ether	143-22-6	96 Hr LC50 Leuciscus idus: 2200 - 4600 mg/L [static]; 96 Hr LC50 Pimephales promelas: 2400 mg/L [static]; 96 Hr LC50 Pimephales promelas: 2400 mg/L
Diethylene glycol	111-46-6	96 Hr LC50 Pimephales promelas: 75200 mg/L [flow-through]



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3,6,9,12-Tetraoxahexadecan-1-ol	1559-34-8	96 Hr LC50 Salmo gairdneri: >1000 mg/L
Tetraethylene glycol	112-60-7	96 Hr LC50 Oncorhynchus mykiss: >1000 mg/L [static]
Triethylene glycol monomethyl ether	112-35-6	96 Hr LC50 Pimephales promelas: >10000 mg/L [static]; 96 Hr LC50 Brachydanio rerio: >5000 mg/L [static]; 96 Hr LC50 Leuciscus idus: >10000 mg/L [static]
Diethylene glycol monobutyl ether	112-34-5	96 Hr LC50 Lepomis macrochirus: 1300 mg/L [static]
Diethylene glycol monoethyl ether	111-90-0	96 Hr LC50 Oncorhynchus mykiss: 11400 - 15700 mg/L [flow-through]; 96 Hr LC50 Pimephales promelas: 11600 - 16700 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 10000 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 19100 - 23900 mg/L [flow-through]; 96 Hr LC50 Salmo gairdneri: 13400 mg/L [flow-through]

XIII. DISPOSAL CONSIDERATIONS

Disposal Methods: Dispose of according to Federal, State, Local, or Provincial regulations. Clean up and dispose of waste in accordance with all federal, state, and local environmental regulations.

XIV. TRANSPORTATION INFORMATION

Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO).

XV. REGULATORY INFORMATION

TSCA Status: All components of this material are on the US TSCA Inventory or are exempt.
NAFTA Tariff Code: 3819.00.0000
State Restrictions: None Listed.
WHMIS: D2B

Chemical Name	Regulation	CAS #	% Range
None Listed.	CERCLA RQ		
None Listed.	SARA 302-EHS		
3,6,9,12,15,18-Hexaoxaicosane	TSCA 12b export notification	23601-39-0	1 - 5
None Listed.	CA Prop 65 – Cancer		
Diethylene glycol	Canadian WHMIS List	111-46-6	10 - 30
Diethylene glycol monobutyl ether	Canadian WHMIS List	112-34-5	1 - 5
Diethylene glycol monoethyl ether	Canadian WHMIS List	111-90-0	1 - 5
None Listed.	Massachusetts RTK List		
None Listed.	New Jersey RTK List		
Ethanol, 2,2'-oxybis-	Pennsylvania RTK List	111-46-6	10 - 30
Diethylene glycol	Minnesota Hazardous Substance List	111-46-6	10 - 30
Diethylene glycol monoethyl ether	Minnesota Hazardous Substance List	111-90-0	1 - 5

Consumer Product Safety Improvement Act of 2008 General Conformity Certification:

This product has been evaluated and certified to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product container.



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XVI. ADDITIONAL INFORMATION

Supersedes: 2012-11-30 16:29:19

Revision Date: 2012-12-12 16:27:25

Created by: HAZEMS

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