



# MATERIAL SAFETY DATA SHEET

## BVA 3,4 & 5

### SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name	BVA 3,4 & 5	Date Prepared	September 8, 1997
Chemical Family	Petroleum Hydrocarbons	Prepared By	David J. Vincent
Manufacturer: BVA OILS P.O. 930301 Wixom, Mi. 48393		Phone	1-248-348-4920
		Emergency Phone	CHEM TRAC
			1-800-424-9300
Material Uses : Refrigeration Oil			

### SECTION II: Composition & Information on Ingredients

Chemical Name	CAS #	EXPOSURE LIMITS			
		OSHA PEL Mist	STEL (ppm)	ACIGH TVL Mist	% by V/V
Severely Hydrotreated Heavy Naphthenic Distillate	64742-44--5	5mg/m <sup>3</sup> (oil Mist)	NA	5mg/m <sup>3</sup> (oil Mist)	100
Toxicological data on Ingredients	Acute oral toxicity : LD50 > 5000 mg/kg (rat)				

### SECTION III: Hazard Identification

Eye :	May cause eye irritation.
Inhalation :	If sprayed or misted may cause chemical pneumonitis.
Ingestion :	Low toxicity on ingestion, has laxative effect.
Skin :	Minimally irritating. Prolonged or repeated contact may cause skin irritation & inflammation

### SECTION IV : FIRST AID PROCEDURES

Eye :	Tests on similar materials suggest that no eye effect be expected.
Skin:	Tests on similar materials indicate that no significant adverse health effects are expected to occur upon short- term exposure.
Inhalation :	Tests on similar material indicate no significant adverse effects expected.
Ingestion :	Tests on similar materials indicate no significant adverse effects expected. Practically non toxic.

**Chronic:** Prolonged and/or repeated contact with this material may produce skin irritation and inflammation. Carcinogen listed by : National Toxicology Program (NO)  
 I.A.R.C. (NO)  
 OSHA (NO)  
 ACGIH (NO)

This product does not require a cancer hazard warning in accordance with the OSHA Hazard Communication Standard.

#### SECTION V : FIRE FIGHTING PROCEDURES

<b>Flammability of Product</b>	Low Fire Hazard,
<b>Auto Ignition Temp.</b>	343 C (650 F)
<b>Flash Point COC</b>	177 C (350 F)
<b>Flammability Limits</b>	Not Applicable
<b>Products to avoid</b>	Strong oxidizing agents, including peroxide, chlorine and strong acids.
<b>OSHA/NFPA Rating</b>	Class III Combustible liquid
<b>Unusual Hazards :</b>	If heated above it flash will release flammable vapors which can burn in the open or be explosive in confined spaces if exposed to an ignition source. Burning fluid may evolve irritating/noxious fumes.
<b>Extinguishing Agents :</b>	Dry chemical, CO <sub>2</sub> foam, water fog. NOTE: Water, fog, foam may cause frothing and splattering.
<b>Protective Clothing :</b>	Firefighters should use pressure demand NIOSH/MNSA approved self-contained breathing apparatus and full protective gear.
<b>Firefighting Procedures :</b>	<b>SMALL FIRE :</b> Use dry chemicals, CO <sub>2</sub> water spray or foam , <b>SMALL OUT DOOR FIRE ;</b> may extinguished with a portable fire extinguisher. <b>LARGE FIRE :</b> Use water to cool containers exposed to flames. Use dry chemicals, CO <sub>2</sub> water spray or foam Do not use water jet. Respiratory and eye protection required for fire fighting personnel. A self contained breathing apparatus should be used for all indoor fires.

#### SECTION VI : ACCIDENTAL RELEASE MEASURES

<b>Personal Protection :</b>	Wear protective clothing including splash proof goggles, rubber gloves and rubber overshoes. Remove all contaminated clothing promptly.
<b>Procedures :</b>	Close off source of spill. Floor may be slippery: use care to avoid falling. Contain spill immediately to prevent from entering waterways and sewers with inert material (e.g. sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. Advise EPA or State Agency if required.
	<b>CAUTION:</b> Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**SECTION VII : HANDLING AND STORAGE**

Avoid contact with eyes, skin and clothing. WASH hands with soap and water after handling and before eating, drinking, smoking or use of toilet facilities.

Ensure that containers are properly secured before moving.

Keep container closed and keep away from oxidizing materials.

Store in a cool-well ventilated area.

"Empty" containers retain residue (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. Do not attempt to clean since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. For work on tanks refer to Occupational Safety and Health Administration regulations, ANSI Z49.1, and other governmental and industrial references pertaining to cleaning, repairing, welding, or other contemplated operations. NFPA Class IIIb storage.

**SECTION VIII : EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Eye	Safety glasses (ANSI Z87.1) or approved equivalent. Have suitable eye wash water available.
Skin	Avoid prolonged or repeated contact. If prolonged contact cannot be avoided, wear impervious gloves such as polyvinyl, neoprene, nitrile, viton, polyvinyl alcohol. If splashing likely wear oil resistant clothing or apron. Also full face shield.
Inhalation	Use in well ventilated area. If mist is being generated and exceeds the TWA/TLV listed below than a respiratory program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed.
Engineering Controls	General Ventilation
Exposure Limits	TLV 5mg/m <sup>3</sup> 8 hours: manufacturers recommendation based on ACGIH TLV for oil mist
Hazardous Decomposition:	Analogous compounds evolve carbon monoxide, carbon dioxide, and other unidentified fragments when burned.
Other/General Protection	If there is likelihood of splashing, an oil resistant clothing should be worn. Never wear oil soaked clothing. Launder or dry clean before wearing. Discard oil soaked shoes. Affix warning labels on containers in accordance with 29 CFR 1910.1200 (Hazard Communication Standard)

**SECTION IX : PHYSICAL & CHEMICAL PROPERTIES**

Appearance	Clear	Specific Gravity (Water=1)	0.9
Physical State	LIQUID	pH (1%)	neutral
Color	pale straw colored	% Volatility	Non-Volatile
Odor	N.D.	Viscosity SUS	150, 300 & 500
Vapor Pressure	0.0001mm of Hg@ 20C	Evaporate Rate	1000X slower than ethyl ether
Vapor Density	> 5	Solubility in Water	insoluble

**SECTION X : STABILITY & REACTIVITY**

Stability:	Stable
Conditions to Avoid:	Sources of ignition
Material to Avoid:	Strong oxidants such as liquid chlorine, peroxides, concentrated oxygen, sodium hypochlorite, calcium hypochlorite
Hazardous Decomposition:	Analogous compounds evolve carbon monoxide, carbon dioxide, and other unidentified fragments when burned. See Section 5.
Hazardous Polymerization:	Will not occur.
Corrosivity	Not Applicable

**SECTION XI: TOXICOLOGICAL INFORMATION**

Routes of Entry : Skin contact and Inhalation	
Dermal LD50 - Rabbit	> 5000 mg / kg
Toxicity to Animals	Oral LD50 > 5000 mg/ kg (rat)
Chronic Effects on Humans	If sprayed or mist may cause chemical pneumonitis. Prolonged exposure to skin may cause chapping, cracking or possible dermatitis.
This product is severely hydrotreated. Severely hydrotreated naphthenic petroleum oils has not been found to be carcinogenic or a potential carcinogen. This product is not listed as a carcinogen by the National Toxicology Program, by the IARC monographs or by OSHA.	

**SECTION XII : ECOLOGICAL INFORMATION**

Ecotoxicity	Not Determined
BOD5 and COD	Not Determined
Toxicity of Products Biodegradation	Not Determined

**SECTION XIII : WASTE DISPOSAL**

Consult your local or regional authorities. Preferred waste management priorities are (1) recycle or reprocess. (2) incineration with energy recovery; (3) disposal at licensed waste facility. Ensure that disposal or reprocessing is in compliance with local, state and federal regulations. DO not flush to drain or storm sewer. Not RCRA waste if uncontaminated.
--

**SECTION XIV: TRANSPORT INFORMATION**

This product is non-hazardous. The product contains no known carcinogens. No special warning labels are required under OSHA 29 CFR 1910.1200. OSHA hazard warning are not applicable for this product; Therefore no OSHA Warnings would appear on the label. No EPA hazard classification code.	
DOT Classification	Not DOT controlled
DOT (Pictograms)	None
Hazard Class	Not Applicable

## SECTION XV : REGULATORY INFORMATION

Degree of Hazard	NFPA	HMIS	HAZARD RATINGS	
Health	0	0	0	Insignificant
Fire	1	1	1	Moderate
Reactivity	0	0	2	High
Specific Hazards	None		3	Extreme
Personal Protection Index		a	4	Extreme
Other Regulations	All components of this formulation are listed in the Domestic Substances List (DBL.. Canadian) and in the Toxic substance Control Act Inventory (TSCA). The product contains no known carcinogens.			
WHMIS (Canada)	Not a WHMIS controlled material			
DSCL (EEC)	Not controlled under DSCL (Europe)			
CERCLA (40 CFR 302.40)	Not Listed, no reportable quantities			
EPCRA/EPCRA or SARA TITLE III Section 313 Toxic Chemicals	Not Listed			

**Notice To reader**

To the best of our knowledge the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.