

**MATERIAL SAFETY DATA SHEET**

<b>SECTION1: MATERIAL IDENTIFICATION AND USE</b>		<b>FLAMMABILITY HEALTH</b>	<b>REACTIVITY PERSONAL PROTECTION</b>
Material Name Identifier : Emkadixol Brake Fluid Dot4			
Manufacturer's Name: QUALITY LIQUID PACKAGING			
Address: 50 Tiffield Road Unit 9			
City: Toronto	Province: Ontario		
Postal Code: M1V 5B7	Emergency Telephone# (416) 609-0828		
Trade Name & Synonyms Rev Brake Fluid Dot 4	R 539 R540,R541,R542,R543,&R545	Material Use	

<b>SECTION 11 – HAZARDOUS INGREDIENTS OF MATERIAL</b>				
<b>Hazardous Ingredients</b>	<b>Approximate Concentration %</b>	<b>C.A.S.N.A or U.N Numbers</b>	<b>Hazard</b>	<b>LD50 LC50 Specify Species and Route</b>
Alkyl Ether	>=30,<=50%	Not Available	WHMIS not hazardous.	Oral Rat LD50=5300mg/kg, (ether)LD50=6.6g/kg Oral rat
Triethylene glycol monobutyl ether	>=10 ,40%	143-22-6	Toxic	Rabbit:LD50 3540ul/kg Rabbit:LD50 3501 mg/kg
Triethylene glycol monomethyl ether	<=2%	112-35-6	WHMIS, not hazardous.	Rat LD50=11300µ1/kg Rabbit :LD50µ 7100u/kg
Poly ethylene glycol monomethyl ether	<=20%	9004-74-4	WHMIS, not hazardous.	
Poly ethylene glycol monobutyl ether	>=10 <=20%	25322-68-3	WHMIS, not hazardous	
Poly (ethylene oxide)	>=5-<=15%	25322-68-3	WHMIS, not hazardous.	LD 50 not available.
Inhibitor package	>=1 <3%	Not available	WHMIS, not hazardous.	

**Significant DATA with possible relevance to human:**

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In studies rats trithylene glycol monomethyl ether produced testicular atrophy when administered in drinking water over a 90 day period at a dosage level attainable 4g/kg/day.

Evidence of development toxicity in the presence of maternal toxicity was noted in offspring of pregnant rats receiving large oral doses of triathlon glycol monomethyl ether. Doses of 1250mg/kg/day higher administered during the period of organogenesis were associated with effects typically attributed to delayed development. A dose of 1000mk/kg was a clear NO Observed Effects Level (NOEL) for developmental toxicity in this species. No evidence of development toxicity to was noted in rabbits even at doses as high as 1500mg/kg, a dose which was severely toxic to the mothers. Contains one or more amines which may react with nitrites or other nitro sating agents to form nitrosamines. Some nitrosamines have been shown to be carcinogenic in laboratory animals.

<b>SECTION 111 –PHYSICAL /CHEMICAL CHARACTERISTICS.</b>		
Physical State: Gas( ) Liquid(x) Solid()	Specific Gravity: -1.05 20C/20C	
Vapour Density: @20 C<0.001KPa<0.01mmHg	Evaporate rate: 9BUTYLACETATE+1)<0.01	Vapour Pressure <0.01mm HG
Boiling Point (°C)-270°C (518°F)	Solubility in water: 100% with haze	Freezing Point © Pour Point -<-50°C (<-58°F)
Material V.O.C N/A	Appearance and odour: transparent yellow Ammonia fishy.	

<b>Section 1V –FIRE AND EXPLOSION HAZARD OF MATERIAL</b>
Flammability Yes( ) No (X ) If yes Under which conditions: Auto ignition temperature not currently available.
Means of Extinction. Apply alcohol –type r all purpose –type foam by manufactures recommended techniques for large fires. Use water spray or dry chemical media for small fires.
Special Procedures: Do not direct a solid stream of water or foam into hot burning pools. This may cause frothing and increasing fire intensity.
Flash Point (°C) and method ->121.1°C->250°F Pensky martens closed cup ASTM D 93 Cleveland open cup ASTM D92 ->148.8°C >300°F
Oxides of carbon and nitrogen. Carbon monoxide is highly toxic if inhaled. Carbon dioxide is sufficient concentration can act as an asphyxiate. Acute exposure to the product of combustion may result in irritation of the respiratory tract.
Explosive power during a fire oxide of nitrogen may be produced. Explosion data sensitivity to chemical impact.

<b>SECTION V-REACTIVITY DATA</b>
Stability: Stable
Conditions to avoid: Avoid excessive temperatures. Warning: do not mix this product with either nitrites or nitro sating agents, because a nitrosamine may be foamed. Nitrosamines may cause cancer.
Incompatibility (Materials to avoid): Strong alkalizes high temperatures in the presence of strong bases, acids or strong oxidizing agents.

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Hazardous decomposition or by-products: Incomplete combustion can produce carbon monoxide, carbon dioxide, unidentified hydrocarbons and other harmful product.

**SECTION VI TOXICOLOGICAL PROPERTIES OF PRODUCT**

**Primary route of Entry** Skin contact(x) skin absorption(x) eye contact (x) Inhalation Acute(x) Ingestion (x)

**Effects of Acute Exposure to Products** Contact with skin may cause slight irritation.

**Effects of Chronic Exposure to Products** Repeated or prolonged exposure may cause discomfort & local redness defecting and drying and peeling of the skin . Skin contact may cause sensitization and an allergic skin reaction. Eye contact may cause mild discomfort Excess redness of the conjunctiva may occur.

**SECTION VII- PREVENTITIVE MEASURES****Personal protection Equipment: Proper Ventilation**

**Gloves:** Neoprene protective gloves should be worn, **Eyes:** splash proof goggles **Clothes-** Impervious clothing.

**Leak & spill Procedures:** Small spills can be flushed with large amounts of water. Large spills should be collected for disposal of in accordance with environmental legislation. Be sure to wear suitable protective equipment. Avoid contact with eyes.

**Waste disposal** In accordance with Environmental regulations.

**Handling Procedures & Equipment:** Avoid contact with eyes, skin, & clothing avoid repeated breathing of aerosol. Use adequate ventilation. Wash thoroughly after handling. Do not add nitrates or other nitro sating agents A nitrosamine which may cause cancer may be formed.

**Storage Requirements:** keep containers closed.

**WHMIS CLASSIFICATION:** D2B: Toxic materials causing other effects.

**SECTION VIII – FIRST AID MEASURES.**

**EYE:** Flush eyes with cold water for 15 minutes get immediate medical attention.

**SKIN:** Remove any contaminated clothing. Wash immediately with soap and water and rinse with large amounts of water. If necessary get medical attention.

**INHALATION:** Remove exposed person to fresh air. If breathing is labored administer oxygen, if breathing has stopped apply artificial respiration and get medical attention.

**INGESTION:** If patient is fully conscious five 2 glasses of water. Induce vomiting. This should be done only by medical or experienced qualified First Aid personnel Obtain medical attention. **\*\*\*Note to physician.** There is no antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

**GENERAL ADVICE:** Always employ caution and get medical help for any serious exposure.

**SECTION IX – PREPARATION DATE OF M.S.D.S.**

THIS MSDS WAS PREPARED ON JANUARY 15, 2017

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