Issuing Date 04-Dec-2012

#### **Revision Date** 6/3/15

## **SAFETY DATA SHEET**

#### **Revision Number 1**

**GHS** product identifier

Product Name B2900, B2901, B2902, B2905, B29055

Description DOT 4 Brake Fluid
Other means of identification

**Synonyms** 

Automotive brake fluid

## Supplier's details

Manufacturer Name The Berkebile Oil Company Address 1216 Red Brant Road

Somerset, PA 15501, PO BOX 715

Phone 814-443-1656 Email info@berkebileoil.com

Fax 814-443-2873 Chemtrec Emergency Tel # 800-424-9300



## **Classification**

This chemical is not considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

GHS Label elements, including precautionary statements

**Emergency Overview** 

#### **Precautionary Statements**

#### Prevention

¥Wash face, hands and any exposed skin thoroughly after handling

¥Wear eye/face protection

#### **General Advice**

¥None

## **Eyes**

¥ÍF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

¥If eye irritation persists: Get medical advice/attention.

## **Storage**

**¥None** 

#### Disposal

¥None

## **Hazard Not Otherwise Classified (HNOC)**

Not applicable

#### Other information

No information available.

## **Synonyms**

#### Automotive brake fluid

Chemical Name	CAS-No	Weight %	Trade secret
Triethylene glycol monoethyl ether	112-50-5	20-30	*
Diethylene glycol monoethyl ether	111-90-0	10-20	*
Diethylene glycol monobutyl ether	112-34-5	5-10	*
Diethylene glycol	111-46-6	3-8	*

<sup>\*</sup>The exact percentage (concentration) of composition has been withheld as a trade secret.

## Description of necessary first-aid measures

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. If irritation persists, call a physician.

**Skin Contact** Wash skin with soap and water.

**Inhalation** Move to fresh air.

#### Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Get medical attention if symptoms occur.

## Most important symptoms/effects, acute and delayed

#### **Most Important Symptoms/Effects**

Red eyes Irritation.

Indication of immediate medical attention and special treatment needed, if necessary

## **Notes to Physician**

Treat symptomatically.

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## Unsuitable Extinguishing Media None

## **Specific Hazards Arising from the Chemical**

None known

**Explosion Data** 

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## Personal precautions, protective equipment and emergency procedures

## **Personal Precautions**

Use personal protective equipment. Avoid contact with eyes.

## **Environmental Precautions**

Environmental Precautions See Section 12 for additional Ecological Information

## Methods and materials for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Dam up. Soak up with inert absorbent material. Sweep up and shovel into suitable

containers for disposal. Clean contaminated surface thoroughly.

## Precautions\_for\_safe\_handling

**Handling** Wear personal protective equipment. Avoid contact with eyes.

## Conditions for safe storage, including any incompatibilities

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products Strong oxidizing agents.

## **Control parameters**

#### **Exposure Guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

## Appropriate engineering controls

## **Engineering Measures**

Showers. Eyewash stations.

## Individual protection measures, such as personal protective equipment

Eye/Face Protection Skin and Body Protection

Tightly fitting safety goggles. Protective gloves.

**Respiratory Protection**No special protective equipment required.

**Hygiene Measures** Provide regular cleaning of equipment, work area and clothing.

#### Information on basic physical and chemical properties

## **Physical State Odor**

Liquid Etheric

None known

## **Appearance Odor Threshold**

Amber

No information available

Property Values

Remarks/ - Method

**pH** 10.5

Melting Point/RangeNo data availableBoiling Point/Boiling Range> 230 °CFlash Point203 °C

None known None known

Evaporation rate No data available None known

Flammability (solid, gas) No data available

Flammability Limits in Air

None known

upper flammability limit

No data available

lower flammability limitNo data availableVapor PressureNo data availableVapor DensityNo data available

None known None known

**Relative Density Specific Gravity** 

No data available 1.06 None known None known

Water Solubility Completely soluble Solubility in other solvents Completely soluble. Partition coefficient: n-octanol/waterNo data available Autoignition Temperature No data available Decomposition Temperature No

data available **Viscosity** <1500 CST

None known None known None known None known None known

Flammable Properties Not flammable

Explosive Properties No data available
Oxidizing Properties No data available

Other information

VOC Content (%) None

## Reactivity

No data available.

Stable under recommended storage conditions.

## Possibility of hazardous reactions

None under normal processing.

Hazardous polymerization does not occur.

#### Conditions to avoid

None known based on information supplied.

## Incompatible materials

Strong oxidizing agents.

#### Hazardous decomposition products

Carbon oxides.

## Information on likely routes of exposure

**Product Information**No acute toxicity information is available for this product.

**Inhalation** May cause irritation of respiratory tract.

**Eye Contact** Irritating to eyes.

**Skin Contact** Non-irritating during normal use

**Ingestion** Ingestion may cause irritation to mucous membranes.

## Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Eye contact with liquid may cause irritation including stinging, burning, tearing, or reddening

of the eyes.

## Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity There are no known carcinogenic chemicals in this product.

Reproductive Toxicity
STOT - single exposure
STOT - repeated exposure
Aspiration Hazard
No information available.
No information available.
No information available.

## Numerical measures of toxicity • - Product

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral 2244 mg/kg; Acute toxicity estimate LD50 Dermal 2710 mg/kg; Acute toxicity estimate

#### **Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to	Daphnia Magna (Water
			Microorganisms	Flea)

Diethylene glycol		LC50 96 h: 11400-15700		EC50 48 h: 3940 -
monoethyl		mg/L flow-through		4670
ether		(Oncorhynchus mykiss)		mg/L (Daphnia magna)
		LC50 96 h:		
		11600-16700		
		mg/L flow-through		
		(Pimephales promelas)		
		` LC50 96 h:		
		19100-23900		
		mg/L flow-through		
		(Lepomis macrochirus)		
		LC50 96 h: = 10000 mg/L		
		static (Lepomis		
		macrochirus) LC50 96 h:		
		= 13400 mg/L		
		flow-through (Salmo		
		gairdneri)		
Tetraethylene glycol	EC50 96 h: > 1000 mg/L	LC50 96 h: > 1000 mg/L	EC50 > 100 mg/L 6 h	EC50 48 h: > 1000 mg/L
i ou dout y one gry oo.	(Pseudokirchneriella			(Daphnia magna)
	subcapitata)	static (Oncorhynchus mykiss)		(24)4
Triethylene glycol		LC50 96 h: 56200-63700	EC50 = 850 mg/L 5 min	EC50 48 h: = 42426 mg/L
I industries gives		mg/L flow-through		(Daphnia magna)
		(Pimephales promelas)		(24)4
		LC50 96 h: = 10000 mg/		
		====================================		
		static (Lepomis		
		macrochirus) LC50 96 h:		
		= 61000 mg/L		
		flow-through (Lepomis		
		macrochirus)		
Diethylene glycol	EC50 96 h: > 100 mg/L	LC50 96 h: = 1300 mg/L		EC50 24 h: = 2850 mg/L
monobutyl	(Desmodesmus	static (Lepomis		(Daphnia magna) EC50
ether	subspicatus)	macrochirus)		48 h: > 100 mg/L
5.1151	ousopioutae)	maoreom ae,		(Daphnia magna)
Diethylene glycol		LC50 96 h: = 75200 mg/	EC50 = 29228 mg/L 15	EC50 48 h: = 84000 mg/L
Dictifyione gryoon			min	(Daphnia magna)
		flow-through		(Dapinia magna)
		(Pimephales		
		promelas)		
1		promotao)	I	

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

ĺ	Chemical Name	Log Pow
Diethylene glycol monoethyl ether		-0.8
	Diethylene alycol	-1.98

## Other Adverse Effects

No information available.

**Waste Disposal Methods** 

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging** 

Do not re-use empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

DOT Not regulated

TDG Not regulated

MEX Not regulated

# International Inventories TSCA

Complies

**DSL** Complies

## Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

## **U.S. Federal Regulations**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Triethylene glycol monoethyl ether	112-50-5	20-30	1.0
Diethylene alycol monobutyl ether	112-34-5	5-10	1 0

## SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

## **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

## **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

## U.S. State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

## U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Triethylene glycol monoethyl ether			Х	Х	
Diethylene glycol monoethyl ether			Х	Х	
Triethylene glycol			X		Х

## **U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**NFPA HMIS Health Hazard** 2

**Health Hazard** 2 Flammability 1

Flammability 1 Instability 0

**Physical Hazard** 0 Physical and Chemical Hazards -Personal Protection X

**Prepared By** Berkebile Oil

1-800-572-6501 04-Dec-2012 06-02-2015

**Issuing Date Revision Date Revision Note** Initial Release.

#### **General Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet** 

