# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Trade name : MAG1 DOT 4 BRAKE FLUID 1 GALLON

Product code : MAG62205

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Brake Fluid

### 1.3. Details of the supplier of the safety data sheet

Warren Distribution, Inc. 950 S. 10th St., Suite 300 Omaha, NE 68102

T+01 (800) 825-1235+01 (402) 341-9397

sds@wd-wpp.com

### 1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300, 1-703-527-3887 (International)

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

### **GHS-US** classification

Skin Irrit. 2 H315 Eye Dam. 1 H318 STOT RE 2 H373

Full text of H statements : see section 16

### 2.2. Label elements

### **GHS-US** labeling

Hazard pictograms (GHS-US)





GHS05

GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H315 - Causes skin irritation

H318 - Causes serious eye damage

H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) : P260 - Do not breathe dust,fumes,gas,mist,vapor spray

P264 - Wash affected areas thoroughly after handling

P280 - Wear protective gloves,protective clothing,eye protection,face protection

P302+P352 - If on skin: Wash with plenty of soap and water

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a poison center,doctor, physician
P314 - Get medical advice/attention if you feel unwell
P321 - Specific treatment: See section 4.1 on SDS

P332+P313 - If skin irritation occurs: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse

P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with

local, regional, national, international regulations.

### 2.3. Other hazards

Other hazards not contributing to the

classification

: None under normal conditions.

### 2.4. Unknown acute toxicity (GHS US)

No data available

### SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

05/09/2018 EN (English US) 1/11

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Name	Product identifier	%	GHS-US classification
Triethyleneglycol Monoethyl Ether	(CAS No) 112-50-5	35 - 40	Not classified
Butyl Triglycolether	(CAS No) 143-22-6	10 - 30	Eye Dam. 1, H318
Triethylene Glycol Monomethyl Ether	(CAS No) 112-35-6	5 - 25	Not classified
Diethylene Glycol	(CAS No) 111-46-6	5 - 20	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Methoxypolyethyleneglycols	(CAS No) 9004-74-4	0 - 15	Not classified
Poly(oxy-1,2-ethanediyl), alpha-butyl-omega-hydroxy-	(CAS No) 9004-77-7	0 - 15	Not classified
Polyethylene Glycol	(CAS No) 25322-68-3	6 - 14	Not classified
2-(2-Butoxyethoxy) Ethanol	(CAS No) 112-34-5	5 - 10	Eye Irrit. 2, H319
Triethyleneglycol	(CAS No) 112-27-6	0 - 10	Not classified
Diethyleneglycolmonoethyl Ether	(CAS No) 111-90-0	3 - 5	Eye Irrit. 2A, H319
Diisopropanolamine	(CAS No) 110-97-4	0 - 1	Eye Irrit. 2, H319

The exact percentage is a trade secret.

### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

First-aid measures general

First-aid measures after eye contact

: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get

medical advice/attention.

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you

est in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you eel unwell

First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON

CENTER or doctor/physician if you feel unwell.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Causes damage to organs. Suspected of damaging fertility or the unborn child.

Symptoms/injuries after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if

inhaled.

Symptoms/injuries after skin contact : May cause moderate irritation. Itching. Red skin. Skin rash/inflammation. Causes skin irritation.

Symptoms/injuries after eye contact : Irritation of the eye tissue. Inflammation/damage of the eye tissue. Redness of the eye tissue.

Causes serious eye damage.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

# **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

No additional information available

## 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

# **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Use special care to avoid static electric charges.

### 6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses.

Emergency procedures : Evacuate unnecessary personnel.

### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

05/09/2018 EN (English US) 2/11

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 6.3. Methods and material for containment and cleaning up

For containment

: Dam up the liquid spill. Plug the leak, cut off the supply. Contain released product, pump into

suitable containers.

Methods for cleaning up

Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Precautions for safe handling

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Use only outdoors or in a well-ventilated area. Avoid breathing

dust,fume,gas,mist,vapor spray. Obtain special instructions . Do not handle until all safety

precautions have been read and understood.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after

handling. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Take off immediately all contaminated clothing and wash it before reuse. Observe normal hygiene standards. Keep container tightly closed. Always wash hands after handling the product. Remove contaminated clothes. Separate working clothes from town clothes. Launder

separately.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container

closed when not in use.

Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.
Storage area : Keep only in the original container.
Special rules on packaging : Keep only in original container.

7.3. Specific end use(s)

Follow Label Directions.

## **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

LICA ACCILL	2-(2-Butoxyethoxy) Ethanol (112-34-5)		
USA ACGIH TWA (ppm) 10 ppm (innalable fraction and vapor)	USA ACGIH	CGIH TWA (ppm)	10 ppm (Inhalable fraction and vapor)

### 8.2. Exposure controls

Appropriate engineering controls : Local exhaust venilation, vent hoods . Ensure good ventilation of the work station.

Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure.





Materials for protective clothing : GIVE EXCELLENT RESISTANCE:

Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Wear appropriate mask.

Respiratory protection : Wear appropriate mask.

Environmental exposure controls : Avoid release to the environment.

Consumer exposure controls : Avoid contact during pregnancy/while nursing.

Other information : Do not eat, drink or smoke during use.

# **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state: LiquidAppearance: Liquid.Color: Amber. Yellow.

Odor : Mild . Ammoniacal
Odor threshold : No data available

05/09/2018 EN (English US) 3/11

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

pH : 9 - 11

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : < -59 °C

Freezing point : No data available

Boiling point : > 230 °C Flash point : 203 °C

Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available

Vapor pressure : < 0.01 mm Hg Estimated

Relative vapor density at 20 °C : > 10

Relative density : 1.03 - 1.08

Solubility : Soluble in v

: Soluble in water. Water: 100% Estimated

Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : < 1500 cSt
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosion limits : No data available

9.2. Other information

VOC content : 0 %

### **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

No additional information available

# 10.2. Chemical stability

Not established.

# 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

# 10.5. Incompatible materials

LD50 dermal rabbit

Oxidizing agent. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide.

## **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

Triethyleneglycol Monoethyl Ether (112-50-5)	
LD50 oral rat	7750 mg/kg (Rat, Oral)
LD50 dermal rabbit	8168 mg/kg (Rabbit, Dermal)
ATE CLP (oral)	7750 mg/kg body weight
ATE CLP (dermal)	8168 mg/kg body weight
Butyl Triglycolether (143-22-6)	
LD50 oral rat	5170 mg/kg body weight (according to BASF-internal standards, Rat, Male/female, Experimental value, Oral)
LD50 dermal rabbit	3540 mg/kg body weight (OECD 402: Acute Dermal Toxicity, Rabbit, Male, Experimental value, Dermal)
ATE CLP (oral)	5170 mg/kg body weight
ATE CLP (dermal)	3540 mg/kg body weight
Polyethylene Glycol (25322-68-3)	
LD50 oral rat	30200 mg/kg (Rat, Literature study, Oral)

05/09/2018 EN (English US) 4/11

> 20000 mg/kg (Rabbit, Inconclusive, insufficient data, Dermal)

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Polyethylene Glycol (25322-68-3)	
ATE CLP (oral)	30200 mg/kg body weight
<u> </u>	- COLOG Mg Rg Dody Holgin
2-(2-Butoxyethoxy) Ethanol (112-34-5) LD50 dermal rabbit	2764 mg/kg body weight (Equivalent or similar to OECD 402, Rabbit, Male, Experimental
ED30 definal rappit	value, Dermal)
ATE CLP (oral)	2410 mg/kg body weight
ATE CLP (dermal)	2764 mg/kg body weight
	2704 mg/kg body woight
Diethylene Glycol (111-46-6)	40000 and a hardward to 40000 404. And a Oral Tarities Dat Male For advantable day
LD50 oral rat	19600 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral)
LD50 dermal rabbit	11890 mg/kg (Rabbit, Dermal)
LC50 inhalation rat (mg/l)	> 4.6 mg/l air (Other, 4 h, Rat, Weight of evidence, Inhalation (mist))
ATE CLP (oral)	500 mg/kg body weight
ATE CLP (dermal)	11890 mg/kg body weight
Diethyleneglycolmonoethyl Ether (111-90-0)	
LD50 oral rat	EAAE malka (Pot Orol)
	5445 mg/kg (Rat, Oral)
LD50 dermal rabbit	5940 mg/kg (Rat, Dermal)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal) > 5.2 mg/l (4 h, Rat, Inhalation)
LC50 inhalation rat (mg/l)	
ATE CLP (dormal)	5445 mg/kg body weight
ATE CLP (dermal)	5940 mg/kg body weight
Triethyleneglycol (112-27-6)	
LD50 oral rat	> 2000 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Literature study, Dermal)
Methoxypolyethyleneglycols (9004-74-4)	
LD50 oral rat	> 2000 mg/kg body weight (Rat, Oral)
LD50 dermal rabbit	> 2000 mg/kg body weight (Rabbit, Dermal)
Poly(oxy-1,2-ethanediyl), alpha-butyl-omega	-hydroxy- (9004-77-7)
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male/female, Experimental
	value, Oral)
LD50 dermal rabbit	3540 mg/kg body weight (Modification of Draize 1959 method, 24 h, Rabbit, Male, Read-
	across, Dermal)
ATE CLP (dermal)	3540 mg/kg body weight
Triethylene Glycol Monomethyl Ether (112-3	5-6)
LD50 oral rat	11865 mg/kg (Rat, Oral)
LD50 dermal rabbit	7455 mg/kg (Rabbit, Dermal)
ATE CLP (oral)	11865 mg/kg body weight
ATE CLP (dermal)	7455 mg/kg body weight
Diisopropanolamine (110-97-4)	
LD50 oral rat	4765 mg/kg (Rat, Oral)
LD50 dermal rat	16000 mg/kg (Rat, Dermal)
LD50 dermal rabbit	8000 mg/kg (Rabbit, Dermal)
ATE CLP (oral)	4765 mg/kg body weight
ATE CLP (dermal)	8000 mg/kg body weight
Skin corrosion/irritation	: Causes skin irritation.
Okin concolor/imation	pH: 9 - 11
Serious eye damage/irritation	: Causes serious eye damage.
Serious eye damage/imation	pH: 9 - 11
Despiratory or akin consitization	·
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
· Aspiration hazard	: Not classified
Potential Adverse human health effects and	: Based on available data, the classification criteria are not met. Harmful if swallowed. Harmful
	. Dasca on avaliable data, the diassilication differia are not filet. Fallifiul ii Swallowed. Fallifiul i
symptoms	inhaled.

05/09/2018 EN (English US) 5/11

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Symptoms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.
Symptoms/injuries after skin contact	: May cause moderate irritation. Itching. Red skin. Skin rash/inflammation. Causes skin irritation.
Symptoms/injuries after eye contact	: Irritation of the eye tissue. Inflammation/damage of the eye tissue. Redness of the eye tissue. Causes serious eye damage.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.
SECTION 12: Ecological informati	ion
12.1. Toxicity	
Triethyleneglycol Monoethyl Ether (112-	50-5)
LC50 fish 1	> 10000 mg/l (96 h, Pimephales promelas)
Butyl Triglycolether (143-22-6)	
LC50 fish 1	2200 - 2400 mg/l (DIN 38412-15, 96 h, Leuciscus idus, Static system, Fresh water,
	Experimental value)
EC50 Daphnia 1	> 500 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
Polyethylene Glycol (25322-68-3)	
LC50 fish 1	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Poecilia reticulata, Static system, Fresh water, Experimental value, Nominal concentration)
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)
2-(2-Butoxyethoxy) Ethanol (112-34-5)	
LC50 fish 1	1300 mg/l (Equivalent or similar to OECD 203, 96 h, Lepomis macrochirus, Static system,
	Fresh water, Experimental value, Nominal concentration)
EC50 Daphnia 1	> 100 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 (algae)	1101 mg/l (Equivalent or similar to OECD 201, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
Diethylene Glycol (111-46-6)	·
LC50 fish 1	> 5000 ppm (24 h, Carassius auratus)
EC50 Daphnia 1	> 10000 mg/l (24 h, Daphnia magna)
LC50 fish 2	75200 mg/l (Other, 96 h, Pimephales promelas, Flow-through system, Experimental value)
EC50 Daphnia 2	> 10000 mg/l (DIN 38412-11, 24 h, Daphnia magna, Static system, Fresh water, Experimental value)
Diethyleneglycolmonoethyl Ether (111-9	0-0)
LC50 fish 1	12900 mg/l (96 h, Salmo gairdneri, Flow-through system)
EC50 Daphnia 1	3940 mg/l (48 h, Daphnia magna)
Triethyleneglycol (112-27-6)	
LC50 fish 1	61000 mg/l (96 h, Lepomis macrochirus, Flow-through system)
EC50 Daphnia 1	42426 mg/l (48 h, Daphnia magna)
Poly(oxy-1,2-ethanediyl), alpha-butyl-om	ega-hydroxy- (9004-77-7)
LC50 fish 1	> 1800 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Scophthalmus maximus, Semi-static system, Salt water, Experimental value, GLP)
EC50 Daphnia 1	> 3200 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semistatic system, Fresh water, Experimental value, GLP)
ErC50 (algae)	2490 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Selenastrum capricornutum, Static system, Fresh water, Read-across, GLP)
Triethylene Glycol Monomethyl Ether (11	
LC50 fish 1	> 5000 mg/l (96 h, Brachydanio rerio, Measured concentration)
Diisopropanolamine (110-97-4)	
LC50 fish 1	1000 - 2200 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio)
EC50 Daphnia 1	277.7 mg/l (48 h, Daphnia magna)
12.2. Persistence and degradability	
MAG1 DOT 4 BRAKE FLUID 1 GALLON	
Persistence and degradability	Not established.
<u> </u>	
Triethyleneglycol Monoethyl Ether (112-	,
Persistence and degradability	Readily biodegradable in water. Not established.
Butyl Triglycolether (143-22-6)	
Persistence and degradability	Readily biodegradable in water. Low potential for adsorption in soil. Photooxidation in the air. Not established.
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05/09/2018 EN (English US) 6/11

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Polyethylene Glycol (25322-68-3)	
Persistence and degradability	Readily biodegradable in water. Not established.
2-(2-Butoxyethoxy) Ethanol (112-34-5)	
Persistence and degradability	Readily biodegradable in water. Low potential for adsorption in soil. Photooxidation in the air. Not established.
Diethylene Glycol (111-46-6)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil. Photolysis in the air. Not established.
Biochemical oxygen demand (BOD)	0.02 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.51 g O <sub>2</sub> /g substance
ThOD	1.51 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.015
Diethyleneglycolmonoethyl Ether (111-90-	
Persistence and degradability	Readily biodegradable in water. Not established.
Biochemical oxygen demand (BOD)	0.2 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.85 g O <sub>2</sub> /g substance
ThOD  BOD (% of ThOD)	1.9078849 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.11
Triethyleneglycol (112-27-6)	
Persistence and degradability	Inherently biodegradable. Readily biodegradable in water. Photolysis in the air. Not established.
Biochemical oxygen demand (BOD)	0.03 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.57 g O <sub>2</sub> /g substance
ThOD	1.6 g O <sub>2</sub> /g substance
Methoxypolyethyleneglycols (9004-74-4)	
Persistence and degradability	Biodegradability in water: no data available. Not established.
Poly(oxy-1,2-ethanediyl), alpha-butyl-ome	
Persistence and degradability	Readily biodegradable in water. Not established.
Triethylene Glycol Monomethyl Ether (112	
Persistence and degradability	Inherently biodegradable. Non degradable in the soil. Photodegradation in the air. Not established.
Diisopropanolamine (110-97-4)	
Persistence and degradability	Not readily biodegradable in water. Not established.
12.3. Bioaccumulative potential	
MAG1 DOT 4 BRAKE FLUID 1 GALLON	
Bioaccumulative potential	Not established.
Triethyleneglycol Monoethyl Ether (112-50	0-5)
Bioaccumulative potential	Not bioaccumulative. Not established.
Butyl Triglycolether (143-22-6)	
Log Pow	0.51 (20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4). Not established.
Polyethylene Glycol (25322-68-3)	
BCF fish 1	3.2 (Other, Pisces, Calculated value)
	0.00 0.7 (W.: 1.1 ( .: 1 ) 0.000)
Log Pow	-0.960.7 (Weight of evidence approach, Other, 30 °C)
Log Pow Bioaccumulative potential	-0.960.7 (Weight of evidence approach, Other, 30 °C)  Not bioaccumulative. Not established.
-	
Bioaccumulative potential	Not bioaccumulative. Not established.  1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)
Bioaccumulative potential 2-(2-Butoxyethoxy) Ethanol (112-34-5)	Not bioaccumulative. Not established.  1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20
Bioaccumulative potential  2-(2-Butoxyethoxy) Ethanol (112-34-5)  Log Pow	Not bioaccumulative. Not established.  1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)
Bioaccumulative potential  2-(2-Butoxyethoxy) Ethanol (112-34-5)  Log Pow  Bioaccumulative potential	Not bioaccumulative. Not established.  1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)
Bioaccumulative potential  2-(2-Butoxyethoxy) Ethanol (112-34-5) Log Pow  Bioaccumulative potential  Diethylene Glycol (111-46-6)	Not bioaccumulative. Not established.  1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)  Low potential for bioaccumulation (Log Kow < 4). Not established.
Bioaccumulative potential  2-(2-Butoxyethoxy) Ethanol (112-34-5)  Log Pow  Bioaccumulative potential  Diethylene Glycol (111-46-6)  BCF fish 1	Not bioaccumulative. Not established.  1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)  Low potential for bioaccumulation (Log Kow < 4). Not established.  100 (Other, 3 day(s), Leuciscus melanotus, Static system, Fresh water, Experimental value)
Bioaccumulative potential  2-(2-Butoxyethoxy) Ethanol (112-34-5)  Log Pow  Bioaccumulative potential  Diethylene Glycol (111-46-6)  BCF fish 1  Log Pow	Not bioaccumulative. Not established.  1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)  Low potential for bioaccumulation (Log Kow < 4). Not established.  100 (Other, 3 day(s), Leuciscus melanotus, Static system, Fresh water, Experimental value)  -1.98 (Calculated, Other)  Low potential for bioaccumulation (BCF < 500). Not established.
Bioaccumulative potential  2-(2-Butoxyethoxy) Ethanol (112-34-5)  Log Pow  Bioaccumulative potential  Diethylene Glycol (111-46-6)  BCF fish 1  Log Pow  Bioaccumulative potential	Not bioaccumulative. Not established.  1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)  Low potential for bioaccumulation (Log Kow < 4). Not established.  100 (Other, 3 day(s), Leuciscus melanotus, Static system, Fresh water, Experimental value)  -1.98 (Calculated, Other)  Low potential for bioaccumulation (BCF < 500). Not established.

05/09/2018 EN (English US) 7/11

# Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Triethyleneglycol (112-27-6)			
Log Pow	-1.75 (Literature study)		
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4). Not established.		
Methoxypolyethyleneglycols (9004-74-4)			
Bioaccumulative potential	No bioaccumulation data available. Not established.		
Poly(oxy-1,2-ethanediyl), alpha-butyl-omega-h	nydroxy- (9004-77-7)		
Log Pow	0.436 (Experimental value, EU Method A.8: Partition Coefficient, 25.5 °C)		
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4). Not established.		
Triethylene Glycol Monomethyl Ether (112-35-	-6)		
Log Pow	-1.13		
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.		
Diisopropanolamine (110-97-4)			
Log Pow	-0.79		
Bioaccumulative potential	Bioaccumulation: not applicable. Not established.		
12.4. Mobility in soil			
Butyl Triglycolether (143-22-6)			
Surface tension	0.0614 N/m		
Ecology - soil	Low potential for adsorption in soil.		
Polyethylene Glycol (25322-68-3)			
Log Koc	1 (log Koc, Other, Calculated value)		
Ecology - soil	Highly mobile in soil.		
2-(2-Butoxyethoxy) Ethanol (112-34-5)			
Surface tension	27 mN/m (25 °C, 0.00212 mol/g)		
Ecology - soil	Low potential for adsorption in soil.		
Diethylene Glycol (111-46-6)			
Surface tension	0.0485 N/m		
Log Koc	0 (log Koc, SRC PCKOCWIN v1.66, Calculated value)		
Ecology - soil	Highly mobile in soil.		
Diethyleneglycolmonoethyl Ether (111-90-0)			
Surface tension	0.032 N/m (25 °C)		
Triethyleneglycol (112-27-6)	Triethyleneglycol (112-27-6)		
Surface tension	0.045 N/m (20 °C)		
Poly(oxy-1,2-ethanediyl), alpha-butyl-omega-h	nydroxy- (9004-77-7)		
Surface tension	0.0614 N/m (20 °C)		
Ecology - soil	Low potential for adsorption in soil.		
Triethylene Glycol Monomethyl Ether (112-35-	-6)		
Surface tension	0.0314 N/m		
12.5 Other adverse effects			

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

# **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of

contents/container to appropriate waste disposal facility, in accordance with local, regional,

national, international regulations.

Ecology - waste materials : Avoid release to the environment.

# **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground): Not regulated, ICAO/IATA (air): Not regulated, IMO/IMDG (water): Not regulated,

# 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not regulated

05/09/2018 EN (English US) 8/11

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 14.3. Additional information

Other information

: No supplementary information available.

### **Overland transport**

No additional information available

### Transport by sea

No additional information available

### Air transport

No additional information available

### **SECTION 15: Regulatory information**

### 15.1. US Federal regulations

### MAG1 DOT 4 BRAKE FLUID 1 GALLON

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 311/312 Hazard Classes Immediate (acute) health hazard Delayed (chronic) health hazard

# Triethyleneglycol Monoethyl Ether (112-50-5)

Subject to reporting requirements of United States SARA Section 313

### Triethylene Glycol Monomethyl Ether (112-35-6)

Subject to reporting requirements of United States SARA Section 313

### 15.2. International regulations

### **CANADA**

### MAG1 DOT 4 BRAKE FLUID 1 GALLON

Listed on the Canadian DSL (Domestic Substances List)

### Triethylene Glycol Monomethyl Ether (112-35-6)

### **EU-Regulations**

### Triethylene Glycol Monomethyl Ether (112-35-6)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xi; R41

Xi; R38

R52/53

Full text of R-phrases: see section 16

### 15.2.2. National regulations

### MAG1 DOT 4 BRAKE FLUID 1 GALLON

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

### Triethylene Glycol Monomethyl Ether (112-35-6)

### 15.3. US State regulations

MAG1 DOT 4 BRAKE FLUID 1 GALLON		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	No	
U.S California - Proposition 65 - Reproductive Toxicity - Female	No	
U.S California - Proposition 65 - Reproductive Toxicity - Male	No	
State or local regulations	U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List	

Triethyleneglycol Monoethyl Ether (112-50-5)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
No	No	No	No	

05/09/2018 EN (English US) 9/11

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

		·		
Butyl Triglycolether (14				
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	
9	, ,	Female	Male	
No	No	No	No	
Polyethylene Glycol (25	(322-68-3)			
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List		Reproductive Toxicity -	Reproductive Toxicity -	(NOINE)
Carcinogens List	Developmental Toxicity	Female		
		Female	Male	
No	No	No	No	
2-(2-Butoxyethoxy) Etha	anol (112-34-5)			
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	(NOINE)
Carcinogens List	Developmental Toxicity	Female	Male	
		Female	iviale	
No	No	No	No	
Diethylene Glycol (111-4	46-6)		·	
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	(1.5.12)
Jaromogens List	Developmental Toxicity	Female	Male	
		1 emale	iviale	
No	No	No	No	
Diethyleneglycolmonoe	thyl Ether (111-90-0)		·	
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	(NOTE)
Odromogens List	Developmental Toxicity	Female	Male	
No	No	No	No	
Triethyleneglycol (112-2	27-6)			
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	(NONE)
Carcinogens List	Developmental Toxicity	Female	Male	
		1 emale	iviale	
No	No	No	No	
Methoxypolyethylenegl	vcols (9004-74-4)			-
U.S California -		U.S California -	U.S California -	Non-significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	(NOTCE)
Carcinogens List	Developmental Toxicity	Female	Male	
		1 emale		
No	No	No	No	
Poly(oxy-1,2-ethanediyl	), alpha-butyl-omega-hydroxy	- (9004-77-7)		
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	<u> </u>
<b>J</b> a a <del></del>	,	Female	Male	
	- N			
No	No	No	No	<u></u>
	omethyl Ether (112-35-6)			
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	
•		Female	Male	
No	No	No	No	
		1.00	1.10	
Diisopropanolamine (11	-	1		
U.S California -	U.S California -	U.S California -	U.S California -	Non-significant risk level
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	(NSRL)
Carcinogens List	Developmental Toxicity	Reproductive Toxicity -	Reproductive Toxicity -	
-		Female	Male	
No	No	No	No	
			-	

05/09/2018 EN (English US) 10/11

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Triethyleneglycol Monoethyl Ether (112-50-5)

### State or local regulations

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - New Jersey - Right to Know Hazardous Substance List

### Triethyleneglycol (112-27-6)

### State or local regulations

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

### Triethylene Glycol Monomethyl Ether (112-35-6)

### State or local regulations

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - New Jersey - Right to Know Hazardous Substance List

### **SECTION 16: Other information**

Indication of changes : Revision - See : \*.

Other information : None.

Full text of H-phrases:

•	
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H373	May cause damage to organs through prolonged or repeated
	exposure

NFPA health hazard : 2 - Intense or continued exposure could cause temporary

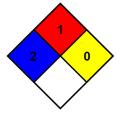
incapacitation or possible residual injury unless prompt

medical attention is given.

NFPA fire hazard : 1 - Must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions,

and are not reactive with water.



### **HMIS III Rating**

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard
Physical : 0 Minimal Hazard

Personal Protection : B

SDS US (GHS HazCom 2012) - TCC

The Supplier identified in Section 1 of this SDS has evaluated this product and certifies it 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

Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.

05/09/2018 EN (English US) 11/11