

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 03/30/2016

SECTION 1: Identification of the sul	bstance/mixture and of the company/undertaking		
1.1. Product identifier			
Product form	: Mixture		
Product name	: Blue Mountain Long Life 50/50 Prediluted Antifreeze and Coolant		
1.2. Relevant identified uses of the sub	stance or mixture and uses advised against		
Use of the substance/mixture	: Antifreeze & Coolant		
1.3. Details of the supplier of the safety	r data sheet		
Old World Industries, LLC 4065 Commercial Ave. Northbrook, IL 60062 - USA T (847) 559-2000 www.oldworldind.com			
1.4. Emergency telephone number			
Emergency number	: (800) 424-9300; (703) 527 3887 (International) Chemtrec		
SECTION 2: Hazards identification			
2.1. Classification of the substance or r	mixture		
GHS-US classification			
Acute toxicity (oral), Category 4 Reproductive toxicity, Category 2 Specific target organ toxicity — Repeated expos Full text of H statements : see section 16	H302 H361 sure, Category 2 H373		
2.2. Label elements			
2.2. Label elements GHS-US labelling			
	: GHS07 GHS08		
GHS-US labelling	: GHS07 GHS08 : Warning		
GHS-US labelling Hazard pictograms (GHS-US)			
GHS-US labelling Hazard pictograms (GHS-US) Signal word (GHS-US)	 Warning H302 - Harmful if swallowed H361 - Suspected of damaging fertility or the unborn child 		

No additional information available

2.4. Unknown acute toxicity (GHS US)

No data available

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SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. **Mixture Product identifier** % by wt **GHS-US** classification Name <= 50 Acute Tox. 4 (Oral), H302 ethylene glycol (CAS No) 107-21-1 (CAS No) 7732-18-5 water < 50 Not classified (CAS No) 111-46-6 Acute Tox. 4 (Oral), H302 diethylene glycol < 3 STOT RE 2, H373 potassium 2-ethylhexanoate (CAS No) 3164-85-0 Repr. 2, H361 < 2 denatonium benzoate (CAS No) 3734-33-6 30 - 50 ppm Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If you feel unwell, seek medical advice.
First-aid measures after skin contact	: Remove contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Rinse immediately with plenty of water (for at least 15 minutes), Get medical advice/attention.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately with plenty of water for 15 minutes, lifting lower and upper lids. If eye irritation persists: Get medical advice and attention.
First-aid measures after ingestion	: Obtain emergency medical attention. Rinse mouth. If the person is fully conscious, make him/her drink two glasses of water. Never give an unconscious person anything to drink. Do NOT induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell. If medical advice is delayed, and if the person has swallowed a moderate volume of material (a few ounces), then give three to four ounces of hard liquor, such as whiskey. For children, give proportionally less liquor, according to weight.
4.2. Most important symptoms and effect	s, both acute and delayed
Symptoms/injuries	: Causes damage to organs (kidneys) Oral. Suspected of damaging fertility or the unborn child.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. The lethal dose in humans is estimated to be 100 mL (3 oz).

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

A more effective intravenous antidote for physician uses is 4-methylpyrazaole, a potent inhibitor of alcohol dehydrogenases, which effectively blocks the formation of toxic metabolites of ethylene glycol. It has been used to decrease the metabolic consequences of ethylene glycol poisoning before metabolic acidosis coma, seizures, and renal failure have occured.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water fog. Fine water spray. Foam. Carbon dioxide. Dry chemical powder. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream. May spread fire.
5.2. Special hazards arising from the su	bstance or mixture
Fire hazard	: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.
Reactivity	: No dangerous reactions known under normal conditions of use.
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 the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

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Special protective equipment for fire fighters : Wear positive pressure self-contained breathing apparatus (SCBA). Protective fire fighting clothing (includes fire-fighting helmet, coat, pants, boots and gloves).

SECTION 6: Accidental release measures 6.1. Personal precautions, protective equipment and emergency procedures 6.1.1. For non-emergency personnel Emergency procedures : Evacuate unnecessary personnel. 6.1.2. For emergency responders : Equip cleanup crew with proper protection. Refer to section 8.2. Protective equipment Emergency procedures : Ventilate area. **Environmental precautions** 6.2. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Methods and material for containment and cleaning up 6.3. Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Small quantities of liquid spill: take up in non-combustible absorbent material and

shovel into container for disposal. Store away from other materials.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and stor	age
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. Obtain special instructions before use. 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.
7.2. Conditions for safe storage,	including any incompatibilities
Storage conditions	 Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use. Product may become solid at temperatures below -37 °C (-34 °F). Do not store near food, foodstuffs, drugs or potable water supplies. Do not cut, drill, weld, use a blowtorch on, etc. containers even when empty.
Incompatible products	: Keep away from strong acids, strong bases and oxidizing agents.
Incompatible materials	: Sources of ignition.
7.3. Specific end use(s)	

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No additional information available
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SECTIO	DN 8: Exposure controls/personal protection
8.1.	Control parameters

ethylene glycol (107-21-1)		
ACGIH ACGIH TWA (mg/m ³) 10 mg/m ³		10 mg/m ³
ACGIH	Remark (ACGIH) Upper Respiratory Tract (URT) & Eye irritant	
OSHA	Not applicable	

8.2. Exposure controls

Personal protective equipment

: Avoid all unnecessary exposure. Gloves. Safety glasses.



Hand protection

Eye protection

Respiratory protection

: Wear protective gloves.

: Chemical goggles or safety glasses.

: Respiratory protection not required in normal conditions. If exposed to levels above exposure limits wear appropriate respiratory protection.

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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	: Liquid	
Color	: Slightly yellow to green	
Odor	: Mild	
Odor threshold	: No data available	
рН	: 8	
Relative evaporation rate (butylacetate=1)	: Nil	
Freezing point	: -37 °C (-34 °F)	
Boiling point	: 107 °C (224 °F)	
Flash point	: 116 °C (241 °F) [100% Ethylene Glycol] ASTM D56	
Auto-ignition temperature	: 400 °C (752 °F) [100% Ethylene Glycol] <i>Literature</i>	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: No data available	
Vapor pressure	: < 0.1 @ 20 ℃	
Relative vapor density at 20 °C	: No data available	
Specific Gravity	: 1.06	
Density	: 1.06 kg/l (8.84 lbs/gal)	
Solubility	: Water: Complete	
Log Pow	: No data available	
Log Kow	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	
Explosive properties	: Not applicable.	
Oxidizing properties	: Not applicable.	
Explosive limits	: Not applicable	
9.2. Other information		
VOC content	: 0%	

SECT	ON 10: Stability and reactivity		
10.1.	Reactivity		
No dang	gerous reactions known under normal cond	litions of use.	
10.2.	Chemical stability		
Stable.			
10.3.	Possibility of hazardous reactions		
Hazardo	ous polymerization will not occur.		
10.4.	Conditions to avoid		
Extreme	ely high or low temperatures. Keep away fro	om any flames or sparking source.	
10.5.	Incompatible materials		
Keep av	vay from strong acids, strong bases and ox	idizing agents.	
10.6.	. Hazardous decomposition products		
Carbon	dioxide. Carbon monoxide. Fume. alcohols	s. Aldehydes. Ethers.	
SECT	ON 11: Toxicological informatio	n	
11.1.	Information on toxicological effects		
Acute to	xicity :	Oral: Harmful if swallowed.	
denate	onium benzoate (3734-33-6)		
LD50 (oral rat	584.00 mg/kg (Rat; Literature study)	
LD50 (LD50 dermal rabbit > 2,000.00 mg/kg (Rabbit; Literature study)		
03/30/20	16	EN (English)	4/9

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denatonium benzoate (3734-33-6)			
ATE US (oral)	S (oral) 584.00 mg/kg bodyweight		
ethylene glycol (107-21-1)			
LD50 oral rat	> 5,000.00 mg/kg (Rat; Literature study)		
ATE US (oral)	500.00 mg/kg bodyweight		
diethylene glycol (111-46-6)			
LD50 dermal rabbit	11,890.00 mg/kg (Rabbit)		
ATE US (oral)	500.00 mg/kg bodyweight		
ATE US (dermal)	11,890.00 mg/kg bodyweight		
Skin corrosion/irritation	: Not classified		
	pH: 8.00		
Serious eye damage/irritation	: Not classified		
	pH: 8.00		
Respiratory or skin sensitisation	: Not classified		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Not classified		
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.		
Specific target organ toxicity (single exposure)	: Not classified		
Specific target organ toxicity (repeated	: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).		
exposure)			
Aspiration hazard	: Not classified		
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.		
Symptoms/injuries after skin contact	: Causes skin irritation.		
Symptoms/injuries after eye contact	: Causes serious eye damage.		
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. The lethal dose in humans is estimated to be 100 mL (3 oz).		

SECTION 12: Ecological information ty

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12.1		VI	cit
12.1	- 10	7 X I	υII

denatonium benzoate (3734-33-6)		
LC50 fish 1	> 1,000.00 mg/l (LC50; 96 h; Salmo gairdneri)	
EC50 Daphnia 1	13.00 mg/l (EC50; 48 h; Daphnia magna)	
ethylene glycol (107-21-1)		
EC50 Daphnia 1	> 10,000.00 mg/l (EC50; 24 h)	
LC50 fish 2	40,761.00 mg/l (LC50; 96 h; Salmo gairdneri)	
diethylene glycol (111-46-6)		
LC50 fish 1	> 5,000.00 mg/l (LC50; 24 h)	
EC50 Daphnia 1	> 10,000.00 mg/l (EC50; 24 h)	

12.2. Persistence and degradability

denatonium benzoate (3734-33-6)	
Persistence and degradability Biodegradability in water: no data available. No (test) data on mobility of the substance available.	
ethylene glycol (107-21-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.47 g O ₂ /g substance

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ethylene glycol (107-21-1)	
Chemical oxygen demand (COD)	1.24 g O ₂ /g substance
ThOD	1.29 g O ₂ /g substance
BOD (% of ThOD)	0.36
diethylene glycol (111-46-6)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil. Photolysis in the air.
Biochemical oxygen demand (BOD)	0.02 g O ₂ /g substance
Chemical oxygen demand (COD)	1.51 g O ₂ /g substance
ThOD	1.51 g O ₂ /g substance
BOD (% of ThOD)	0.02

12.3. Bioaccumulative potential

denatonium benzoate (3734-33-6)	
BCF fish 1	1.4 - 3.6 (BCF; BCFBAF v3.00)
Log Pow	1.78 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
ethylene glycol (107-21-1)	
BCF fish 1	10.00 (BCF; 72 h)
BCF other aquatic organisms 1	0.21 - 0.6 (BCF)
BCF other aquatic organisms 2	190.00 (BCF; 24 h)
Log Pow	-1.34 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
diethylene glycol (111-46-6)	
BCF fish 1	100.00 (BCF; Other; 3 days; Leuciscus melanotus; Static system; Fresh water; Experimental value)
Log Pow	-1.98 (Calculated; Other)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

ethylene glycol (107-21-1)			
Surface tension	ension 0.05 N/m (20 °C / 68 °F)		
diethylene glycol (111-46-6)			
Surface tension	0.05 N/m		
Log Koc	Koc,SRC PCKOCWIN v1.66; 1; Calculated value; log Koc; SRC PCKOCWIN v1.66; 0; Calculated value		

12.5. Other adverse effects	
Effect on ozone layer	: No known effect on the ozone layer
Effect on global warming	: No known effects from this product.
Other information	: Avoid release to the environment.
SECTION 13: Disposal consideration	ons
SECTION 13: Disposal consideration	ons
	 Dispose of contents/container to appropriate waste disposal facility, in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

Department of Transportation (DOT) In accordance with DOT

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Transport document description	: UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III
UN-No.(DOT)	: UN3082
Proper Shipping Name (DOT)	: Environmentally hazardous substances, liquid, n.o.s.
Class (DOT)	: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
Packing group (DOT)	: III - Minor Danger
Hazard labels (DOT)	: 9 - Class 9 (Miscellaneous dangerous materials)
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Symbols	: G - Identifies PSN requiring a technical name
DOT Packaging Exceptions (49 CFR 173.xxx)	: 155
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: No limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: No limit
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel
Other information	: Non Bulk: Not regulated by the US D.O.T. (in quantities under 5,000 lbs in any one inner package).
TDG	
Refer to current TDG Canada for further Cana	dian regulations
Transport by sea	
Proper Shipping Name (IMDG)	: Not regulated by IMDG (in quantites under 5,000 lbs in any one inner package)
Air transport	
Proper Shipping Name (IATA)	: Not regulated by IATA (in guantites under 5.000 lbs in any one inner package)

Proper Shipping Name (IATA)

: Not regulated by IATA (in quantites under 5,000 lbs in any one inner package)

Blue Mountain Long Life 50/50 Prediluted A	ntifreeze and Coola	ant		
EPA TSCA Regulatory Flag		Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed		
denatonium benzoate (3734-33-6)				
Listed on the United States TSCA (Toxic Subs	tances Control Act) i	nventory		
ethylene glycol (107-21-1)				
Listed on the United States TSCA (Toxic Subs Subject to reporting requirements of United Sta				
EPA TSCA Regulatory Flag	T - T - indicates	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA		
CERCLA RQ	5000 lb(s)	5000 lb(s)		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Ethylene glycol is subject to Tier I and/or Tier II annual inventory reporting			
SARA Section 313 - Emission Reporting	Ethylene glycol is subject to Form R Reporting requirements.			
diethylene glycol (111-46-6)				
Listed on the United States TSCA (Toxic Subs	tances Control Act) i	nventory		

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15.2. International regulations

CANADA

Blue Mountain Long Life 50/50 Prediluted Antifreeze and Coolant	
WHMIS Classification	This SDS has been prepared according to the criteria of the Hazardous Products Regulations (HPR) (WHMIS 2015) and the SDS contains all of the information required by the HPR. Applicable GHS information is listed in section 2.2 of this SDS

EU-Regulations

No additional information available

National regulations

Blue Mountain Long Life 50/50 Prediluted Antifreeze and Coolant
DSL (Canada): The intentional ingredients of this product are listed
ECL (South Korea): The intentional ingredients of this product are listed
EINECS (Europe): The intentional ingredients of this product are listed
ENCS (Japan): The intentional ingredients of this product are listed

15.3. US State regulations

California Proposition 65 - This product contains, or may contain, substance(s) known to the state of California to cause cancer, developmental toxicity and/or reproductive toxicity

ethylene glycol (107-21-1)				
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	Yes	No	No	

ethylene glycol (107-21-1)

U.S. - Massachusetts - Right To Know List

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

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

diethylene glycol (111-46-6)

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

SECTION 16: Other information

Revision date

: 03/30/2016

Full text of H-statements:

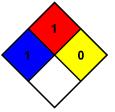
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated
	exposure

NFPA fire hazard

NFPA reactivity

: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

- : 1 Must be preheated before ignition can occur.
- : 0 Normally stable, even under fire exposure conditions, and are not reactive with water.



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HMIS III Rating	
Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 °F (93 °C). (Class IIIB)
Physical	: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal Protection	B - Safety glasses, Gloves

SDS GHS US (GHS HazCom 2012) OWI

Old World Industries, LLC makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of this product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by Old World Industries, LLC as to the effects of such use, the results to be obtained or the safety and toxicity of this product, nor does Old World Industries, LLC assume liability arising out of the use by others of this product referred to herein. The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.