

Safety Data Sheet

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

SECTION 1: Identification of the s	ubstance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: PEAK Cool Extended Life Concentrate Antifreeze & Coolant
1.2. Relevant identified uses of the su	ubstance or mixture and uses advised against
Use of the substance/mixture	: Antifreeze & Coolant
1.3. Details of the supplier of the safe	ety 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 o	T mixture
GHS-US classification	
Acute Tox. 4 (Oral)         H302           Repr. 2         H361           STOT RE 2         H373	
Full text of H statements : see section 16	
2.2. Label elements	
GHS-US labelling	
Hazard pictograms (GHS-US)	: GHS07 GHS08
Signal word (GHS-US)	: Warning
Hazard statements (GHS-US)	: H302 - Harmful if swallowed H361 - Suspected of damaging fertility or the unborn child H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral)
Precautionary statements (GHS-US)	<ul> <li>P201 - Obtain special instructions before use</li> <li>P202 - Do not handle until all safety precautions have been read and understood</li> <li>P260 - Do not breathe mist, spray, vapors</li> <li>P264 - Wash affected areas thoroughly after handling</li> <li>P270 - Do not eat, drink or smoke when using this product</li> <li>P280 - Wear personal protective equipment as required</li> <li>P301+P310 - If swallowed: Immediately call doctor/physician or poison center</li> <li>P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing</li> <li>P308+P313 - If exposed or concerned: Get medical advice/attention</li> <li>P405 - Store locked up</li> <li>P501 - Dispose of contents/container, in a safe manner, to appropriate waste disposal facility, in accordance with local/regional/national/international regulations</li> </ul>
2.3. Other hazards	
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

Name	Product identifier	% by wt	GHS-US classification
ethylene glycol	(CAS No) 107-21-1	90 - 97	Acute Tox. 4 (Oral), H302
diethylene glycol	(CAS No) 111-46-6	< 5	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
water	(CAS No) 7732-18-5	< 4	Not classified
potassium 2-ethylhexanoate	(CAS No) 3164-85-0	< 3	Repr. 2, H361
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 you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical advice. Allow the victim to rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
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: Rinse immediately with plenty of water. Get medical advice/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 or 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 effects	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	: Fine water spray. Dry powder. Alcohol-resistant foam. Foam. Carbon dioxide. Sand. Water fog.
Unsuitable extinguishing media	: Do not use a heavy water stream. May spread fire.
5.2. Special hazards arising from the sub	ostance 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 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).

SECT	ION 6: Accidental release mea	isures
6.1.	Personal precautions, protective e	quipment and emergency procedures
6.1.1.	For non-emergency personnel	
Emerge	ency procedures	: Evacuate unnecessary personnel.
6.1.2.	For emergency responders	
Protect	ive equipment	: Equip cleanup crew with proper protection. Refer to section 8.2.
Emerge	ency procedures	: Ventilate area.
6.2.	Environmental precautions	
Preven	t entry to sewers and public waters. Noti	fy authorities if liquid enters sewers or public waters.
6.3.	Methods and material for containm	ent and cleaning up
Method	s 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 He	ading 8. Exposure controls and persona	l protection.
SECT	ION 7: Handling and storage	
7.1.	Precautions for safe handling	
Precau	tions 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.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling.
7.2. Conditions for safe storage, include	ng any incompatibilities
Storage conditions	<ul> <li>Keep only in the original container in a cool, well ventilated place away from : Heat sources.</li> <li>Keep container closed when not in use. Product may become solid at temperatures below -18         <sup>o</sup>C (0 °F). Do not cut, drill, weld, use a blowtorch on, etc. containers even when empty. Do not         store near food, foodstuffs, drugs or potable water supplies.</li> </ul>
Incompatible products	: Keep away from strong acids, strong bases and oxidizing agents.
Incompatible materials	: Sources of ignition.
7.3. Specific end use(s)	

No additional information available

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

8.1. Control parameters

ethylene glycol (107-21-1)		
ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
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

## Other information

- : Wear protective gloves.
- : Chemical goggles or safety glasses.
- : If exposed to levels above exposure limits wear appropriate respiratory protection.
- : Do not eat, drink or smoke during use.

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SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and ch		
-	: Liquid	
	: orange	
Odor	: Mild	
Odor threshold	: No data available	
1	: 8	
	: -18 °C (0 °F)	
	: 158 °C (317 °F)	
	: 116 °C (241 °F) [100% Ethylene Glycol] <i>ASTM D56</i>	
	: 400 °C (752 °F) [100% Ethylene Glycol] <i>Literature</i>	
I I	: No data available	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	: No data available	
	: < 0.1 @ 20 °C	
	: No data available	
	: 1.12	
Density	: 1.12 kg/l (9.3 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	: 3.2 - 15.3 vol %	
9.2. Other information		
VOC content	: 0.00 %	
SECTION 10: Stability and reactivity		
10.1. Reactivity		
No dangerous reactions known under normal cond	ditions of use.	
10.2. Chemical stability		
Stable.		
10.3. Possibility of hazardous reactions		
Hazardous polymerization will not occur.		
10.4. Conditions to avoid		
Extremely high or low temperatures. Keep away fr	orn any names or sparking source.	
10.5. Incompatible materials		
Keep away from strong acids, strong bases and o	xidizing agents.	
10.6. Hazardous decomposition products		
Carbon dioxide. Carbon monoxide. Fume. alcohol	s. Aldehydes. Ethers.	
SECTION 11: Toxicological information	on	
11.1. Information on toxicological effects		
	: Oral: Harmful if swallowed.	
denatonium benzoate (3734-33-6)		
LD50 oral rat	584.00 mg/kg (Rat; Literature study)	
LD50 dermal rabbit	> 2,000.00 mg/kg (Rabbit; Literature study)	
ATE US (oral)	584.00 mg/kg bodyweight	

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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
Serious eye damage/irritation	: Not classified
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 exposure)	: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral). May cause damage to organs through prolonged or repeated exposure
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
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 12.1. Toxicity

# 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 > 5,000.00 mg/l (LC50; 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 <sub>2</sub> /g substance	
Chemical oxygen demand (COD)	1.24 g O <sub>2</sub> /g substance	
ThOD	1.29 g O <sub>2</sub> /g substance	
BOD (% of ThOD)	0.36	

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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 O₂/g substance
Chemical oxygen demand (COD)	1.51 g O₂/g substance
ThOD	1.51 g O₂/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	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 ecological damage caused by this product.
Other information	: Avoid release to the environment.

SECTION 13: Disposal considera	ations
13.1. Waste treatment methods	
Waste disposal recommendations	: Dispose of contents/container, in a safe manner, to appropriate waste disposal facility, in accordance with local/regional/national/international regulations.
Ecology - waste materials	: Avoid release to the environment.
SECTION 14: Transport informat	ion
Department of Transportation (DOT)	

Transport document description	: UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III
UN-No.(DOT) Proper Shipping Name (DOT) Class (DOT)	<ul> <li>: UN3082</li> <li>: Environmentally hazardous substances, liquid, n.o.s.</li> <li>: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140</li> </ul>

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Hazard labels (DOT)	: 9 - Class 9 (Miscellaneous dangerous materials)
Packing group (DOT)	: III - Minor Danger
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
OOT 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 Canadia	n regulations

Transport by sea
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Proper Shipping Name (IMDG)	: Not regulated by IMDG (in quantities under 5,000 lbs in any one inner package)
Air transport	
Proper Shipping Name (IATA)	: Not regulated by IATA (in quantities under 5,000 lbs in any one inner package)

<b>SECTION 15: Regulatory information</b>		
15.1. US Federal regulations		
PEAK Cool Extended Life Concentrate Antifre	eze & Coolant	
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 Substa	nces Control Act) in	ventory
ethylene glycol (107-21-1)		
Listed on the United States TSCA (Toxic Substa Subject to reporting requirements of United State		
EPA TSCA Regulatory Flag	T - T - indicates a	a substance that is the subject of a Section 4 test rule under TSCA
CERCLA RQ	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 Substa	nces Control Act) in	ventory
potassium 2-ethylhexanoate (3164-85-0)		
Listed on the United States TSCA (Toxic Substa	nces Control Act) in	ventory
	·	
15.2. International regulations		

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**WHMIS Classification** 



EU-Regulations No additional information available

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

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD] Not classified

## National regulations

PEAK Cool Extended Life Concentrate Antifreeze & 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	

nylene glycol (107-21-1)
S Massachusetts - Right To Know List S New Jersey - Right to Know Hazardous Substance List S Pennsylvania - RTK (Right to Know) List
ethylene glycol (111-46-6)
S Pennsylvania - RTK (Right to Know) - Environmental Hazard List

## **SECTION 16: Other information**

## 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

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NFPA health hazard	: 1 - Exposure could cause irritation but only minor residual injury even if no treatment 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 - 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)
	solids and serill solids having a hash point above 200 °F (93 °C). (Class IIIB)
Physical	<ul> <li>O 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.</li> </ul>

## 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.