

### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 04/02/2018

<b>SECTION 1: Identificati</b>	ion of the subst	tance/mixture and of the company/undertaking
1.1. Product identifier		
Product form	:	: Mixture
Product name	:	: PEAK Original Equipment Technology North American Vehicles Conventional GREEN 50/50 Prediluted Antifreeze and Coolant
1.2. Relevant identified	uses of the substa	nce or mixture and uses advised against
Use of the substance/mixture	:	: Antifreeze & Coolant
1.3. Details of the suppl	lier of the safety da	ata sheet
Old World Industries, LLC 3100 Sanders Road Northbrook, IL 60062 - USA T (847) 559-2000 www.oldworldind.com		
1.4. Emergency telepho	one number	
Emergency number	:	: 800 424 9300; 00 1 703 527 3887 (International) Chemtrec
SECTION 2: Hazards id	dentification	
2.1. Classification of the	e substance or mix	ture
GHS-US classification		
Acute toxicity (oral),	H302	Harmful if swallowed
Category 4 Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs (kidneys) through prolonged or repeated exposure (oral)
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 H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral)
Precautionary statements (GH	IS-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> </ul>
		P308+P313 - If exposed or concerned: Get medical advice/attention P405 - Store locked up P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local/regional/national/international regulations
2.3. Other hazards		P405 - Store locked up P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with

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

### No data available

### **SECTION 3: Composition/information on ingredients**

### 3.1. Substances

### Not applicable

#### 3.2. **Mixtures GHS-US** classification Name **Product identifier** % by wt ethylene glycol (CAS-No.) 107-21-1 45 - 50 Acute Tox. 4 (Oral), H302 (CAS-No.) 7732-18-5 45 - 50 water Not classified (CAS-No.) 111-46-6 diethylene glycol 1 - 5 Acute Tox. 4 (Oral), H302 STOT RE 2, H373 (CAS-No.) 3734-33-6 denatonium benzoate 30 -50 ppm Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

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. 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	<ul> <li>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.</li> </ul>
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 effe	cts, both acute and delayed
Symptoms/effects	: Causes damage to organs (kidneys) Oral.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects 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: Fire-fighting measures			
5.1. Extinguishing media			
Suitable extinguishing media	: Dry powder. 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 sub	5.2. Special hazards arising from the substance 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.		
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# 5.3. Special protective equipment and precautions for fire-fighters 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.

SECTI	ON 6: Accidental release meas	ures	
6.1.	Personal precautions, protective equ	ipment and emergency procedures	
6.1.1. Emergen	For non-emergency personnel cy procedures	: Evacuate unnecessary personnel.	
6.1.2.	For emergency responders		
	e equipment	: Equip cleanup crew with proper protection. Refer to section 8.2.	
	cy procedures	: Ventilate area.	
6.2.	Environmental precautions		
Prevent	entry to sewers and public waters. Notify	authorities if liquid enters sewers or public waters.	
6.3.	Methods and material for containment	nt and cleaning up	
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 furth	er information refer to section 13. For furt	her information refer to section 8: "Exposure controls/personal protection".	
SECTI	ON 7: Handling and storage		
7.1.	Precautions for safe handling		
Precautio	ons 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, includin	g 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.	
Incompa	tible products	: Keep away from strong acids, strong bases and oxidizing agents.	
Incompa	tible materials	: Sources of ignition.	
7.3.	Specific end use(s)		
No additi	No additional information available		
SECTI	ON 8: Exposure controls/perso	nal protection	

8.1. Control parameters

denatonium benzoate (3734-33-6)		
Not applicable		
ethylene glycol (107-21-1)		
ACGIH	Local name	Ethylene glycol
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m³
ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (Ethylene glycol; USA; Momentary value; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Upper respiratory tract & eye irritant
diethylene glycol (111-46-6)		
Not applicable		

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### water (7732-18-5)

Not applicable

### 8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

### Personal protective equipment:

Avoid all unnecessary exposure. Gloves. Safety glasses.

Hand protection:

Wear protective gloves

#### Eye protection:

Chemical goggles or safety glasses

### **Respiratory protection:**

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



#### 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	: Green
Odor	: Mild
Odor threshold	: No data available
рН	: 10.5 - 11
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] <i>ASTM D56</i>
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 mm Hg @ 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.

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Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity Specific target organ toxicity (single exposure)	pH: 10.5 - 11 : Not classified : Not classified : Not classified : Not classified : Not classified	
Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity Reproductive toxicity	<ul> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul>	
Respiratory or skin sensitisation Germ cell mutagenicity Carcinogenicity	<ul> <li>Not classified</li> <li>Not classified</li> <li>Not classified</li> </ul>	
Respiratory or skin sensitisation Germ cell mutagenicity	<ul><li>Not classified</li><li>Not classified</li></ul>	
Respiratory or skin sensitisation Germ cell mutagenicity	<ul><li>Not classified</li><li>Not classified</li></ul>	
Respiratory or skin sensitisation	: Not classified	
	•	
Serious eye damage/irritation		
Porious ava domaga/irritation	: Not classified	
	pH: 10.5 - 11	
Skin corrosion/irritation	: Not classified	
ATE US (dermal)	11890 mg/kg bodyweight	
LD50 dermal rabbit ATE US (oral)	11890 mg/kg (Rabbit) 500 mg/kg bodyweight	
diethylene glycol (111-46-6)	11000 malla (Dabhit)	
ATE US (oral)	500 mg/kg bodyweight	
LD50 oral rat	> 5000 mg/kg (Rat; Literature study)	
ethylene glycol (107-21-1)	5000 mg/kg (Patriliterature atudu)	
ATE US (oral)	584 mg/kg bodyweight	
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Literature study)	
LD50 oral rat	584 mg/kg (Rat; Literature study)	
denatonium benzoate (3734-33-6)		
Acute toxicity	: Oral: Harmful if swallowed.	
11.1. Information on toxicological effects		
SECTION 11: Toxicological informat		
alcohols. Carbon dioxide. Carbon monoxide. Fur		
10.6. Hazardous decomposition products		
Keep away from strong acids, strong bases and	oxidizing agents.	
10.5. Incompatible materials		
Extremely high or low temperatures. Keep away	from any flames or sparking source.	
10.4. Conditions to avoid		
Hazardous polymerization will not occur.		
10.3. Possibility of hazardous reactions		
10.2. Chemical stability Stable.		
-		
No dangerous reactions known under normal co	nditions of use	
10.1. Reactivity		
SECTION 10: Stability and reactivity		
VOC content	: 0%	
9.2. Other information		
	: Not applicable	
Explosive limits	: Not applicable.	

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Symptoms/effects	: Causes damage to organs (kidneys) Oral.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects 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
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### 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 ppm (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 <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	
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 <sub>2</sub> /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)		
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).	

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12.4. Mobility in soil			
ethylene glycol (107-21-1)			
Surface tension	0.05 N/m (20 °C)		
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 the ozone layer	: No known effect on the ozone layer		
Other information	: Avoid release to the environment.		
SECTION 13: Disposal consideration	S		
13.1. Waste treatment methods			
Product/Packaging disposal recommendations	: 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.		
<b>SECTION 14: Transport information</b>			
Department of Transportation (DOT)			
In accordance with DOT			
Non Bulk (in quantities under 5,000 lbs in any Not regulated by the US DOT	one inner package):		
Bulk (in quantities 5,000 lbs or over in any one	e inner package):		
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)			
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	: No supplementary information available.		

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### **Transportation of Dangerous Goods**

### Refer to current TDG Canada for further Canadian regulations

#### Transport by sea

In accordance with IMDG / IMO Proper Shipping Name (IMDG)

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

#### Air transport

In accordance with IATA / ICAO Proper Shipping Name (IATA)

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

SECTION 15: Regulatory information				
15.1. US Federal regulations				
PEAK Original Equipment Technology North	American Vehicle	es Conventional GREEN 50/50 Prediluted Antifreeze and 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 Substances Control Act) inventory				
ethylene glycol (107-21-1)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313				
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)			
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 Substances Control Act) inventory				
water (7732-18-5)				
Listed on the United States TSCA (Toxic Substances Control Act) inventory				

15.2. International regulations

#### **CANADA**

PEAK Original Equipment Technology North American Vehicles Conventional GREEN 50/50 Prediluted Antifreeze and Coolant		
WHMIS Classification	This SDS has been prepared according to the criteria of the Hazardous Products Regulation	
	(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**

PEAK Original Equipment Technology North American Vehicles Conventional GREEN 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

**WARNING** This product can expose you to ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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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	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
No	Yes	No	No		

hylene 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**

: 04/02/2018

Full text of H-statements:

Revision date

H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated
	exposure

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation. NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur. : 0 - Material that in themselves are normally stable, even under fire NFPA reactivity conditions. Hazard Rating Health : 2 Moderate Hazard - Temporary or minor injury may occur : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, Flammability 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.