

## 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: Identification of the sul</b>	bstance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: PEAK Original Equipment Technology North American Vehicles Extended Life GOLD Concentrate 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 3100 Sanders Road Northbrook, IL 60062 - USA T (847) 559-2000 www.oldworldind.com	
1.4. Emergency telephone number	
Emergency number	: 800 424 9300; 00 1 703 527 3887 (International) Chemtrec
<b>SECTION 2: Hazards identification</b>	
2.1. Classification of the substance or I	mixture
GHS-US classification	
Acute toxicity (oral), H302	Harmful if swallowed
Category 4 Specific target organ H373 toxicity — Repeated exposure, Category 2	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 (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>P301+P331 - If swallowed: rinse mouth. Do NOT induce vomiting</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 to appropriate waste disposal facility, in accordance with local/regional/national/international regulations</li> </ul>
2.3. Other hazards	
No additional information available	
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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

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	0.5 - 5	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
sodium benzoate	(CAS-No.) 532-32-1	0.5 - 5	Acute Tox. 4 (Dermal), H312
water	(CAS-No.) 7732-18-5	1 - 5	Not classified
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

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 breathing is difficult, give oxygen. If you feel unwell, seek medical advice. If not breathing, give artificial respiration.
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.

#### 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.

in humans is estimated to be 100 mL (3 oz).

: Swallowing a small quantity of this material will result in serious health hazard. The lethal dose

5.1.	Extinguishing media	
	extinguishing media	: Water fog. Fine water spray. Foam. Carbon dioxide. Dry chemical powder. Sand.
Unsuitat	ble extinguishing media	: Do not use a heavy water stream. May spread fire.

Symptoms/effects after ingestion

**SECTION 5: Fire-fighting measures** 

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5.2.	Special hazards arising from the substance or mixture	
Fire haza	rd	: 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.	Special protective equipment and pre	cautions for fire-fighters
Firefightir	ng 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	n during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTIO	ON 6: Accidental release meas	ures
6.1.	Personal precautions, protective equipment and emergency procedures	
6.1.1.	For non-emergency personnel	
Emergen	cy procedures	: Evacuate unnecessary personnel.
6.1.2.	For emergency responders	
Protective	e equipment	: Equip cleanup crew with proper protection. Refer to section 8.2.
Emergen	cy procedures	: Ventilate area.
6.2.	Environmental precautions	
Prevent e	entry to sewers and public waters. Notify	authorities if liquid enters sewers or public waters.
6.3.	Methods and material for containment	it 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 furthe	er information refer to section 13. For furt	her information refer to section 8: "Exposure controls/personal protection".
SECTIO	ON 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.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling.
7.2. Conditions for safe storage, includ	ing 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</li> <li>°C (0 °F). Do not store near food, foodstuffs, drugs or potable water supplies. Do not cut, drill,</li> </ul>

 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)

No additional information available

SECTION 8: Exposure controls/personal protection		
8.1. Control parame	eters	
sodium benzoate (532-	32-1)	
Not applicable		
ethylene glycol (107-21	I-1)	
ACGIH	Local name	Ethylene glycol
ACGIH ACGIH TWA (mg/m <sup>3</sup> ) 10 mg/m <sup>3</sup>		
ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (Ethylene glycol; USA; Momentary value; TLV - Adopted Value)

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ethylene glycol (107-21-1)		
ACGIH	Remark (ACGIH)	Upper respiratory tract & eye irritant
diethylene glycol (111-46-6)	1	1
Not applicable		
water (7732-18-5)		
Not applicable		
denatonium benzoate (3734-33-6)		
Not applicable		

#### 8.2. Appropriate engineering controls

## No additional information available

#### Individual protection measures/Personal protective equipment 8.3.

### 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	: Yellow	
Odor	: Mild	
Odor threshold	: No data available	
pH 50% water solution	: 8.4	
Relative evaporation rate (butylacetate=1)	: Nil	
Freezing point	: -18 °C (0 °F)	
Boiling point	: 158 °C (317 °F)	
Flash point	: 116 °C (241 °F) [100% Ethylene Glycol] ASTM D56	
Auto-ignition temperature	: 400 °C (752 °F) [100% Ethylene Glycol] Literature	
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	: 1.13	
Density	: 1.13 kg/l (9.42 lbs/gal)	
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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	: No data available
Oxidizing properties	: No data available
Explosive limits	: 3.2 - 15.3 vol %
9.2. Other information	
VOC content	: 0%
SECTION 10: Stability and reacti	ivity
10.1. Reactivity	
No dangerous reactions known under norm	al conditions of use
-	
10.2. Chemical stability	
Stable.	
10.3. Possibility of hazardous reaction	ons
Hazardous polymerization will not occur.	
10.4. Conditions to avoid	
Extremely high or low temperatures. Keep a	away from any flames or sparking source.
10.5. Incompatible materials	, , , , , , , , , , , , , , , , , , , ,
	and avidizing agente
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Reproductive toxicity	: Not classified
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).
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
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).

SECT	<b>TON 12: Ecological information</b>
12.1.	Toxicity

12.1. Toxicity			
sodium benzoate (532-32-1)	sodium benzoate (532-32-1)		
LC50 fish 1	> 100.00 mg/l (LC50; 96 h; Pimephales promelas)		
EC50 Daphnia 1	< 650.00 mg/l (EC50; 48 h)		
EC50 Daphnia 2	> 100.00 mg/l (EC50; 48 h)		
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)		
denatonium benzoate (3734-33-6)			

## 12.2. Persistence and degradability

sodium benzoate (532-32-1)	
Persistence and degradability	Readily biodegradable in water.
ethylene glycol (107-21-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.47 g O₂/g substance
Chemical oxygen demand (COD)	1.24 g O₂/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 O <sub>2</sub> /g substance
ThOD	1.51 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.02
denatonium benzoate (3734-33-6)	
Persistence and degradability	Biodegradability in water: no data available. No (test) data on mobility of the substance available.
2.4/22/22.42	

> 1,000.00 mg/l (LC50; 96 h; Salmo gairdneri)

13.00 mg/l (EC50; 48 h; Daphnia magna)

LC50 fish 1

EC50 Daphnia 1

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## 12.3. Bioaccumulative potential

sodium benzoate (532-32-1)	
Log Pow	0.84
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).
denatonium benzoate (3734-33-6)	
Log Pow	1.78 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

## 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

Effect	on the ozone	layer
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: No known effect on the ozone layer

Other information	: Avoid release to the environment.

SECTION 13: Disposal considerations			
13.1.	Waste treatment methods		
Product/F	Packaging disposal recommendations	<ul> <li>Dispose of contents/container to appropriate waste disposal facility, in accordance with local/regional/national/international regulations.</li> </ul>	
Ecology -	waste materials	: Avoid release to the environment.	

## SECTION 14: Transport information

## Department of Transportation (DOT)

In accordance with DOT

Non Bulk (in quantities under 5,000 lbs in any one inner package): Not regulated by the US DOT

## Bulk (in quantities 5,000 lbs or over in any one 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

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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	: No supplementary information available.
Transportation of Dangerous Goods	
Refer to current TDG Canada for further Canad	lian regulations
Transport by sea	
In accordance with IMDG / IMO	
	: 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)
<b>SECTION 15: Regulatory information</b>	
15.1. US Federal regulations	
PEAK Original Equipment Technology North	American Vehicles Extended Life GOLD Concentrate Antifreeze and Coolant
EPA TSCA Regulatory Flag	Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed
ethylene glycol (107-21-1)	
Listed on the United States TSCA (Toxic Substates Subject to reporting requirements of United States	
EPA TSCA Regulatory Flag	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 Substat	nces Control Act) inventory
water (7732-18-5)	
Listed on the United States TSCA (Toxic Substat	nces Control Act) inventory
denatonium benzoate (3734-33-6)	
Listed on the United States TSCA (Toxic Substa	nces Control Act) inventory
	· ·

15.2. International regulations

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### CANADA

PEAK Original Equipment Technology North American Vehicles Extended Life GOLD Concentrate Antifreeze and Co		American Vehicles Extended Life GOLD Concentrate Antifreeze and Coolant
	WHMIS Classification	This SDS has been prepared according to the criteria of the Hazardous Products Reg

MIS 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

PEAK Original Equipment Technology North American Vehicles Extended Life GOLD Concentrate 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.

ethylene					
U.S California Propositio - Carcino List	n 65 Developmental	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		

### 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

: 04/02/2018

Full text of H-statements:

H302	Harmful if swallowed
H312	Harmful in contact with skin
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 NFPA reactivity

- : 1 Materials that must be preheated before ignition can occur.
  : 0 Material that in themselves are normally stable, even under fire
  - stable, even under fire

conditions.

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Hazard 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

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