

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 04/20/2022

SECTION 1: Ident	ification of the su	ibstance/mixture and of the company/undertaking
1.1. Product ider		
Product form		: Mixture
Product name		: PEAK Original Equipment Technology North American Vehicles Extended Life ORANGE 50/50 Prediluted Antifreeze and Coolant
SDS ID		: 115031
		bstance or mixture and uses advised against
Use of the substance/m	nixture	: Antifreeze & Coolant
1.3. Details of the	e supplier of the safet	y data sheet
Old World Industries, L 3100 Sanders Road Northbrook, IL 60062 - T (847) 559-2000 www.oldworldind.com		
1.4. Emergency	telephone number	
Emergency number		: 800 424 9300 (United States); 00 1 703 527 3887 (International) Chemtrec
SECTION 2: Haza	rds identification	
2.1. Classificatio	n of the substance or	mixture
GHS-US classification	1	
Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Reproductive toxicity, Category 2	H361	Suspected of damaging fertility or the unborn child.
Specific target organ toxicity — Repeated exposure, Category 2 Full text of H statement	H373 s : see section 16	May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
2.2. Label eleme	nts	
GHS-US labelling		
Hazard pictograms (GF	IS-US)	: GHS07 GHS08
Signal word (GHS-US)		: Warning
Hazard statements (GF	IS-US)	: Harmful if swallowed. Suspected of damaging fertility or the unborn child. May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
Precautionary statemer	nts (GHS-US)	 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist, spray, vapors Wash affected areas thoroughly after handling. Do not eat, drink or smoke when using this product. Wear personal protective equipment as required. If swallowed: Immediately call doctor/physician or poison center If swallowed: rinse mouth. Do NOT induce vomiting If inhaled: Remove person to fresh air and keep comfortable for breathing If exposed or concerned: Get medical advice/attention. Store locked up. Dispose of contents/container to appropriate waste disposal facility, in accordance with
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local/regional/national/international regulations

2.3. Other hazards

No additional information available

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 (antifreezing agent)	(CAS-No.) 107-21-1	45 - 50	Acute Tox. 4 (Oral), H302
water (solvent)	(CAS-No.) 7732-18-5	45 - 50	Not classified
diethylene glycol (antifreezing agent)	(CAS-No.) 111-46-6	0.5 - 5	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
potassium 2-ethylhexanoate (inhibitor)	(CAS-No.) 3164-85-0	0 - 5	Repr. 2, H361
sodium 2-ethylhexanoate (inhibitor)	(CAS-No.) 19766-89-3	0 - 5	Repr. 2, H361
denatonium benzoate (embittering agent)	(CAS-No.) 3734-33-6	.003005 [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 massures	
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 you feel unwell, seek medical advice.
First-aid measures after skin contact	: Wash with plenty of water. Remove contaminated clothing. 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 effects	s, both acute and delayed
Symptoms/effects	: Causes damage to organs (kidneys) Oral. Suspected of damaging fertility or the unborn child.
Symptoms/effects after skin contact	: May cause moderate irritation.
Symptoms/effects after eye contact	Direct contact with the eyes is likely to be irritating.
	 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	: Carbon dioxide. Dry chemical. Foam. Sand. Water fog.
Unsuitable extinguishing media	: Do not use a heavy water stream. May spread fire.

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5.2.	Special hazards arising from the subs	tance 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. Product is not flammable or combustible but may burn under fire conditions.
Reactivity	:	No dangerous reactions known under normal conditions of use.
5.3.	Special protective equipment and pred	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.

SECTION	ON 6: Accidental release measu	res
6.1.	Personal precautions, protective equip	oment and emergency procedures
6.1.1. Emergen	For non-emergency personnel cy procedures :	Evacuate unnecessary personnel.
	For emergency responders e equipment	Equip cleanup crew with proper protection. Refer to section 8.2.
		Ventilate area.
6.2.	Environmental precautions	
Prevent e	entry to sewers and public waters. Notify a	uthorities if liquid enters sewers or public waters.
6.3.	Methods and material for containment	and cleaning up
Mathada	for clooping up	Sock up apillo with inert colide, such as alow or distance on a part of a soon as possible. Collect

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 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. 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 hands, forearms and face thoroughly after handling.
7.2. Conditions for safe storage, including	g any incompatibilities
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Heat sources, direct sunlight. 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)	

No additional information available

SECTION 8: Exposure controls/personal 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/m³) 10 mg/m³			

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ethylene glycol (10	7-21-1)	
ACGIH	ACGIH TWA (ppm)	25 ppm (Vapor fraction)
ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³ (Inhalable fraction, Aerosol only)
ACGIH	ACGIH STEL (ppm)	50 ppm (Vapor fraction)
ACGIH	Remark (ACGIH)	Upper respiratory tract & eye irritant
ACGIH	Regulatory reference	ACGIH 2018
diethylene glycol (*	111-46-6)	
Not applicable		
water (7732-18-5)		
Not applicable		
potassium 2-ethylhexanoate (3164-85-0)		
Not applicable		
sodium 2-ethylhexanoate (19766-89-3)		
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	
Molecular mass	: 62.07 g/mol Ethylene Glycol	
Color	: Orange	
Odor	: Mild	
Odor threshold	: No data available	
рН	: 8-9	
Relative evaporation rate (butylacetate=1)	: Nil	
Freezing point	: -37 °C (-34 °F)	
Boiling point	: 108.3 °C (226.9 °F)	
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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 @ 20 °C
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 limits	: Not applicable
Explosive properties	: Not applicable.
Oxidizing properties	: Not applicable.
9.2. Other information	
VOC content	: 0%

SECTION 10: Stability and reactivity		
10.1. Reactivity		
No dangerous reactions known under normal conditions of use.		
10.2. Chemical stability		
Stable.		
10.3. Possibility of hazardous reactions		
No dangerous reactions known under normal co	nditions of use.	
10.4. Conditions to avoid		
Extremely high or low temperatures. Keep away	from any flames or sparking source.	
10.5. Incompatible materials		
Keep away from strong acids, strong bases and	oxidizing agents.	
10.6. Hazardous decomposition products		
Alcohols. Aldehydes. Carbon dioxide. Carbon m		
SECTION 11: Toxicological informat		
11.1. Information on toxicological effects		
Acute toxicity	: Not classified	
denatonium benzoate (3734-33-6)		
LD50 oral rat	584 mg/kg (Rat, Literature study, Oral)	
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Literature study, Dermal)	
ATE US (oral)	584 mg/kg bodyweight	
ethylene glycol (107-21-1)		
LD50 oral rat	7712 mg/kg bodyweight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))	
LC50 inhalation rat (mg/l)	> 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))	
ATE US (oral)	500 mg/kg bodyweight	
diethylene glycol (111-46-6)		
LD50 oral rat	19600 mg/kg bodyweight (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/4h (Other, 4 h, Rat, Weight of evidence)	
ATE US (oral)	500 mg/kg bodyweight	
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diethylene glycol (111-46-6)	
ATE US (dermal)	11890 mg/kg bodyweight
Skin corrosion/irritation	: Not classified pH: 8 - 9
Serious eye damage/irritation	: Not classified pH: 8 - 9
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-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. Suspected of damaging fertility or the unborn child.
Symptoms/effects after skin contact	: May cause moderate irritation.
Symptoms/effects after eye contact	: Direct contact with the eyes is likely to be irritating.
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

12.1. Toxicity

denatonium benzoate (3734-33-6)	
LC50 fish 1	> 1,000.00 mg/l (96 h, Salmo gairdneri, Literature study)
EC50 Daphnia 1	13.00 mg/l (48 h, Daphnia magna, Literature study)
ethylene glycol (107-21-1)	
LC50 fish 1	40,761.00 mg/l (96 h, Salmo gairdneri, Static system)
EC50 Daphnia 1	> 10,000.00 mg/l (24 h, Daphnia magna)
diethylene glycol (111-46-6)	
LC50 fish 1	> 5,000.00 ppm (24 h, Carassius auratus)
EC50 Daphnia 1	> 10,000.00 mg/l (24 h, Daphnia magna)
LC50 fish 2	75,200.00 mg/l (Other, 96 h, Pimephales promelas, Flow-through system, Experimental value)
EC50 Daphnia 2	> 10,000.00 mg/l (DIN 38412-11, 24 h, Daphnia magna, Static system, Fresh water, Experimental value)

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	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.47 g O_2/g substance
Chemical oxygen demand (COD)	1.24 g O ₂ /g substance
ThOD	1.29 g O ₂ /g substance
BOD (% of ThOD)	0.36

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diethylene glycol (111-46-6)	
Persistence and degradability	Biodegradable in the soil. Biodegradable in water.
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)	
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 (72 h, Leuciscus idus)
BCF other aquatic organisms 1	0.21 - 0.6 (Procambarus sp., Chronic)
BCF other aquatic organisms 2	190.00 (24 h, Algae)
Log Pow	-1.34 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.
diethylene glycol (111-46-6)	
BCF fish 1	100.00 (Other, 3 day(s), Leuciscus melanotus, Static system, Fresh water, Experimental value)
Log Pow	-1.98 (Calculated, Other)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

denatonium benzoate (3734-33-6)	
Ecology - soil	No (test)data on mobility of the substance available.
ethylene glycol (107-21-1)	
Surface tension	48.00 mN/m (20 °C)
Ecology - soil	No (test)data on mobility of the substance available.
diethylene glycol (111-46-6)	
Surface tension	0.05 N/m
Log Koc	0.00 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
Ecology - soil	Highly mobile in soil.
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 considerations	
13.1. Waste treatment methods	
Product/Packaging disposal recommendations	: Dispose of contents/container to an approved waste disposal plant.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

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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
UN-No.(DOT)
Proper Shipping Name (DOT)

Class (DOT) Packing group (DOT) Hazard labels (DOT) : UN3082 Environmentally hazardous substances, liquid, n.o.s. (Ethylene Glycol), 9, III : UN3082

- : Environmentally hazardous substances, liquid, n.o.s.
- Ethylene Glycol
- : 9 Class 9 Miscellaneous hazardous material 49 CFR 173.140
- : III Minor Danger

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: 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 o passenger vessel.
Other information	: No supplementary information available.

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) Air transport	: Not regulated by IMDG (in quantites under 5,000 lbs in any one inner package)
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 Ame	erican Vehicles Extended Life ORANGE 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

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ces Control Act) inventory		
SARA Section 313		
T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.		
5000 lb(s)		
Refer to Section 2 for the OSHA hazard classification Ethylene glycol is subject to Tier I and/or Tier II annual inventory 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		
potassium 2-ethylhexanoate (3164-85-0)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
sodium 2-ethylhexanoate (19766-89-3)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		

15.2. International regulations

CANADA

PEAK Original Equipment Technology North American Vehicles Extended Life ORANGE 50/50 Prediluted Antifreeze and Coolant				
	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.			

sodium 2-ethylhexanoate (19766-89-3)
Listed on the Canadian DSL (Domestic Substances List)

15.3. US State regulations

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 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		(ingested) 8,700 (oral) µg/day

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

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Full text of H-statements:

text of restatements.				
Г	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.		
ſ	H373	May cause damage to organs through prolonged or repeated		
		exposure.		

NFPA health hazard

1 - Materials that, under emergency conditions, can cause significant irritation.
1 - Materials that must be preheated before ignition can occur.

NFPA fire hazard NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



SDS GHS US (GHS HazCom 2012) OWI 1

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.