

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 01/01/2017

SECTION 1: Identification of the sub	stance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: PEAK Original Equipment Technology Asian Vehicles Extended Life GREEN Concentrate Antifreeze and Coolant
1.2. Relevant identified uses of the subs	stance or mixture and uses advised against
Use of the substance/mixture	: Antifreeze & Coolant
1.3. Details of the supplier of the safety	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 n	nixture
GHS-US classification	
Acute toxicity (oral), Category 4 Specific target organ toxicity — Repeated expos	H302 ure, Category 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 H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral)
Precautionary statements (GHS-US)	 P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P260 - Do not breathe mist, spray, vapors P264 - Wash affected areas thoroughly after handling P270 - Do not eat, drink or smoke when using this product P280 - Wear personal protective equipment as required P301+P310 - If swallowed: Immediately call doctor/physician or poison center P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing 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	
No additional information available	
2.4. Unknown acute toxicity (GHS US)	

Safety Data Sheet

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

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
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 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	ts, both acute and delayed
Symptoms/injuries	: Causes damage to organs (kidneys) Oral.
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 sul	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.

Safety Data Sheet

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

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.
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		
Emerge	ncy procedures	: Evacuate unnecessary personnel.	
6.1.2.	For emergency responders		
Protecti	ve equipment	: Equip cleanup crew with proper protection. Refer to section 8.2.	
Emerge	ncy 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.	8. Methods and material for containment 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. 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 furt	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.
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	ng 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 -18 °C (0 °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

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. 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.

Safety Data Sheet

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

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	
pH 50% water solution	: 8	
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 @ 20 ℃	
Relative vapor density at 20 °C	: No data available	
Specific Gravity	: 1.12	
Density	: 1.12 kg/l (9.34 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	: 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 reactivity		

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

Safety Data Sheet

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

10.2. Chemical stability			
Stable.			
10.3. Possibility of hazardous r	3. Possibility of hazardous reactions		
Hazardous polymerization will not occur.			
10.4. Conditions to avoid			
Extremely high or low temperatures.	eep away from any flames or sparking source.		
10.5. Incompatible materials			
Keep away from strong acids, strong	ases and oxidizing agents.		
10.6. Hazardous decomposition	products		
Carbon dioxide. Carbon monoxide. Fu			
SECTION 11: Toxicological			
11.1. Information on toxicologi			
Acute toxicity	: 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		
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		
Poproductivo toxicity			
Reproductive toxicity	: Not classified posure) : Not classified		
Specific target organ toxicity (single e	posure) . Not classified		
Specific target organ toxicity (repeater exposure)	: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).		
Aspiration hazard	: Not classified		
Potential adverse human health effec symptoms	s and : 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).		

SECTI	SECTION 12: Ecological information		
12.1.	Toxicity		
Ecology	- general	: No additional information available.	

Safety Data Sheet

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

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	
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)		
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)		
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 or	n global warming	: No known effects from this product.
Other ini	ormation	: Avoid release to the environment.

SECTION 13: Disposal considerations			
13.1. Waste treatment methods			
Product/Packaging disposal recommendation	ations :	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.	

Safety Data Sheet

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

SECTION 14: Transport information

Department of Transportation (DOT) In accordance with DOT

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 Canadian 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 quantites under 5,000 lbs in any one inner package)

SECTION 15: Regulatory information	
15.1. US Federal regulations	
PEAK Original Equipment Technology Asian Vehicles Extend	ed Life GREEN Concentrate 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

Safety Data Sheet

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

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 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 Asian Vehicles Extended Life GREEN Concentrate 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

PEAK Original Equipment Technology Asian Vehicles Extended Life GREEN 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

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

: 01/01/2017

Safety Data Sheet

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

Full text of H-statements:		
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 - 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	 a 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)	
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.