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PEAK Global Lifetime Concentrate Antifreeze & Coolant

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

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	ubstance/mixture and of the company/undertaking
1.1. Product identifier	- Minture
Product form	: Mixture : PEAK Global Lifetime Concentrate Antifreeze & Coolant
Product name	
1.2. Relevant identified uses of the su Use of the substance/mixture	ibstance or mixture and uses advised against: : Antifreeze & Coolant
1.3. Details of the supplier of the safe	ty data sheet
Old World Industries, LLC 4065 Commercial Ave.	PEAK Antifreeze and Coolant
Northbrook, IL 60062 - USA T (847) 559-2000 www.oldworldind.com	Coolant
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	
GHS-US classification	
Acute Tox. 4 (Oral) H302 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) Hazard statements (GHS-US)	 Warning 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, in a safe manner, 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	
No data available	

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Nume Product Identifier % by wt GHS-US classification ethylene glycol (CA8 No) 107-21-1 90 - 97 Acute Tox. 4 (Oral), H302 diethylene glycol (CA8 No) 114-8-6 < 5 Acute Tox. 4 (Oral), H302 water (CA8 No) 114-8-6 < 5 Acute Tox. 4 (Oral), H302 denatonium benzoate (CAS No) 3734-33-6 30 - 50 ppm Kin thr 2, H313 SECTION 41: First aid measures STOT E2, IA73 STOT E3, H335 SECTION 41: First aid measures First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice, (Alow the label where possible). First-aid measures after inhalation : If breathing is difficult, remove victum to fresh air and keep at rest in a position comfortable for breathing. Seek immediate reprictal. advice, (Mou the victim to rest. If not breathing, give artificial respiration for the tabeling. Weak ontaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing. Weak ontice a supplemental first aid instructions on this label). First-aid measures after eye contact : Remove contal mases, if present and easy to do. Continue rinsing. Rinse immediately with plenty of water (for at least it instructions on this label). First-aid measures after ingestion : Obtain emergency medical attention. Rinse mouth. If the person is fully consclous, make him/her drink two glasses	SECTION 3: Composition/informat 3:1. Substance Not applicable	ion on i	ngredients		
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water (CAS No) 7732-18-5 < 4	ethylene glycol		(CAS No) 107-21-1	90 - 97	Acute Tox. 4 (Oral), H302
denatonium benzoate (CAS No) \$734-33-6 30 - 50 ppm Acute Tox. 4 (Oral), H302 Skin Init. 2, H315 Eye Init. 2A, H315 Eye Init. 2A, H319 STOT SE 3, H335 STOT SE 3, H335 SECTION 4: First aid measures : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). irist-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. irist-aid measures after skin contact : Remove contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin iritiation occurs. Rinse immediately with plenty of water (for at least 15 minutes). Get medical advice/attention. Specific treatment (see supplemental first air instructions on this label). irist-aid measures after ingestion : 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 medic advice and attention. irist-aid measures after ingestion : Obtain emergency medical attention. Rinse mouth. If the person is fully consclous, make 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 that as wilkey. For children, give proportionally less liquor, according to weight. Rinse mouth. Call a POISON CENTER or doctor/phys	diethylene glycol		(CAS No) 111-46-6	< 5	
Skin Irrit. 2, H315 Ever Irit. 2A, H319 STOT SE 3, H335 STOT SE 3, H335 SECTION 4: First aid measures Image: Store Start	water		(CAS No) 7732-18-5		Not classified
E4.1. 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. Specific treatment (see supplemental first air instructions on this label). 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). Get medical advice and upper lids. If eye irritation persists: Get medica advice is datatention. 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. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. 42. Most import	denatonium benzoate		(CAS No) 3734-33-6	30 - 50 ppm	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
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ymptoms/injuries after eye contact : Causes serious eye damage.					
	ymptoms/injuries after skin contact				
symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard. The lethal dos	symptoms/injuries after eye contact	: Cau	ses serious eye damage.		
in humans is estimated to be 100 mL (3 oz).	symptoms/injuries after ingestion			l result in seriou	is health hazard. The lethal dose

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.

Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
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.
5.3. Advice for firefighters	
Reactivity	: No dangerous reactions known under normal conditions of use.
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.
5.2. Special hazards arising from the s	ubstance or mixture
Unsuitable extinguishing media	: Do not use a heavy water stream. May spread fire.
Suitable extinguishing media	: Water fog. Fine water spray. Alcohol-resistant foam. Foam. Carbon dioxide. Dry chemical powder. Sand.

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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).
SECTION 6: Accidental release me	asures
	quipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Equip cleanup crew with proper protection. Refer to section 8.2.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
Prevent entry to sewers and public waters. Not	fy authorities if liquid enters sewers or public waters.
6.3. Methods and material for containm	ient 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. Store away from other materials.
6.4. Reference to other sections	
See Heading 8. Exposure controls and persona	Il 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. Avoid breathing dust/fume/gas/mist/vapors/spray.
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	 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

2 (
ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
ACGIH	Remark (ACGIH)	Upper Respiratory Tract (URT) & Eye irritant
OSHA	Not applicable	- I

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 p	
9.1 Information on basic physical and c	
Physical state	: Liquid
Color	: amber
Odor	: Mild
Odor threshold	: No data available
pH 50% water solution	: 8
Relative evaporation rate (butylacetate=1)	i 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] <i>Literature</i>
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 (9.3 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	: No data available
Oxidizing properties	: No data available
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 con	inditions 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 f	rom any flames or sparking source.
10,5. Incompatible materials Keep away from strong acids, strong bases and c	
10.6. Hazardous decomposition products Carbon dioxide. Carbon monoxide. Fume. alcoho	
SECTION 11: Toxicological informati	
11.1. Information on toxicological effects	
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

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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	: 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). 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

denatonium benzoate (3734-33 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	> 10,000.00 mg/l (EC50; 24 h)

12.2. Persistence and degradability

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 O₂/g substance	
Chemical oxygen demand (COD)	1.24 g O ₂ /g substance	
ThOD	1.29 g O₂/g substance	
BOD (% of ThOD)	0.36	

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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)	
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 soll

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
2.5. Other adverse effects	
Physical activities and a second s	: No known effect on the ozone layer
2.5. Other adverse effects ffect on ozone layer ffect on global warming	 No known effect on the ozone layer No known ecological damage caused by this product.

SECTION 13: Disposal considerations 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 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	

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Hazard labels (DO⊤)	: 9 - Class 9 (Miscellaneous dangerous materials)
	9
Packing group (DOT)	: III - Minor Danger
OOT 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
OOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: No limit
OOT 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).
Refer to current TDG Canada for further Canadi	in regulations
ransport by sea	
JN-No. (IMDG)	: Not regulated by IMDG (in quantities under 5,000 lbs in any one inner package)
Air transport	
	: Not regulated by IATA (in guantities under 5,000 lbs in any one inner package)

しっているい あんだい ひいていたていたちょう アイトちょう ひんてい しょうしょう	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 Sub	stances Control Act) inventory	
ethylene glycol (107-21-1)		
Listed on the United States TSCA (Toxic Sub Subject to reporting requirements of United S		
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)	
	Immediate (acute) health hazard Delayed (chronic) health hazard Ethylene glycol is subject to Tier I and/or Tier II annual inventory reporting	
SARA Section 311/312 Hazard Classes		

15.2. International regulations CANADA

Safety Data Sheet

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



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
H373	May cause damage to organs through prolonged or repeated exposure

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

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.
IMIS III Rating	
lealth	: 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) OW!

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