

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : Summit Green Universal-Light Duty Antifreeze/Coolant - Concentrate

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Automotive Engine Antifreeze & Coolant

1.3. Details of the supplier of the safety data sheet

Summit

1320 1st Street Rock Island, IL 61201 Phone - 309 788 5631

1.4. Emergency telephone number

Emergency number : (800) 424-9300

Chemtrec

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute Tox. 4 (Oral) H302 STOT RE 2 H373

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)





GHS07

CHS

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, 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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SECTION 3: Composition/information on ingredients

Substance 3.1.

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

SECTION 4: First aid measures

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 aid 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, lifting lower and upper lids. If eye irritation persists: Rinse
 - immediately with plenty of water. Get medical advice/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, 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).

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

Extinguishing media

Suitable extinguishing media

- : Water fog. Fine water spray. Alcohol-resistant foam. Foam. Carbon dioxide. Dry chemical
 - powder. Sand.

Unsuitable extinguishing media

: Do not use a heavy water stream. May spread fire.

Special hazards arising from the substance or mixture 5.2.

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.

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 environment.
- : Do not enter fire area without proper protective equipment, including respiratory protection. Protection during firefighting

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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 measures

6.1. Personal precautions, protective equipment 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. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment 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 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 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)		
USA ACGIH	ACGIH Ceiling (mg/m³)	100.00 mg/m³
USA ACGIH	Remark (ACGIH)	Upper Respiratory Tract (URT) & Eye irritant

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure. Gloves. Safety glasses.



Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : 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

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Color : Green
Odor : Mild

Odor threshold : No data available

pH 50% water solution : 10.5 - 11
Relative evaporation rate (butylacetate=1) : Nil

Freezing point : $-18 \, ^{\circ}\text{C} \, (0 \, ^{\circ}\text{F})$ Boiling point : $158 \, ^{\circ}\text{C} \, (317 \, ^{\circ}\text{F})$

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 °C
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 : No data available Log Kow 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 conditions of use.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Keep away from any flames or sparking source. Extremely high or low temperatures.

10.5. Incompatible materials

Keep away from strong acids, strong bases and oxidizing agents.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Fume. Alcohols. Aldehydes. Ethers.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

ethylene glycol (107-21-1)		
LD50 oral rat	> 5,000 mg/kg (Rat)	
ATE US (oral)	500 mg/kg bodyweight	
diethylene glycol (111-46-6)		
LD50 oral rat	12,565 mg/kg (Rat)	
LD50 dermal rabbit	11,890 mg/kg (Rabbit)	
ATE US (oral)	500 mg/kg bodyweight	
ATE US (dermal)	11,890 mg/kg bodyweight	

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denatonium benzoate (3734-33-6)	
LD50 oral rat	584 mg/kg (Rat)
LD50 dermal rabbit	> 2,000 mg/kg (Rabbit)
ATE US (oral)	584 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 (repeated

exposure)

: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).

Aspiration hazard : Not classified

Potential adverse human health effects and

Specific target organ toxicity (single exposure)

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

: Not classified

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

SECTION 12: Ecological information

12.1. Toxicity

ethylene glycol (107-21-1)		
LC50 fish 1	53,000 mg/l (96 h; Pimephales promelas; Static system)	
EC50 Daphnia 1	> 10,000 mg/l (24 h; Daphnia magna)	
LC50 fish 2	40,761 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Static system)	
Threshold limit algae 1	> 10,000 mg/l (168 h; Scenedesmus quadricauda)	
Threshold limit algae 2	2,000 mg/l (192 h; Microcystis aeruginosa)	
diethylene glycol (111-46-6)		
LC50 fish 1	> 5,000 ppm (24 h; Carassius auratus)	
LC50 other aquatic organisms 1	1,174 mg/l (Xenopus laevis)	
EC50 Daphnia 1	> 10,000 mg/l (24 h; Daphnia magna)	
LC50 fish 2	61,072 ppm (168 h; Poecilia reticulata)	
TLM fish 1	> 32,000 mg/l (96 h; Gambusia affinis)	
TLM other aquatic organisms 1	> 1,000 ppm (96 h)	
Threshold limit other aquatic organisms 1	1,174 mg/l (72 h; Xenopus laevis; Toxicity test)	
Threshold limit other aquatic organisms 2	10,745 mg/l (16 h; Protozoa; Toxicity test)	
Threshold limit algae 1	2,700 mg/l (168 h; Scenedesmus quadricauda)	
Threshold limit algae 2	100 mg/l (Selenastrum capricornutum)	
denatonium benzoate (3734-33-6)		
LC50 fish 1	> 1,000 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)	
EC50 Daphnia 1	13 mg/l (48 h; Daphnia magna)	

12.2. Persistence and degradability

ethylene glycol (107-21-1)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Not established.
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 % ThOD
diethylene glycol (111-46-6)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photolysis in the air.
Biochemical oxygen demand (BOD)	0.02 g O ₂ /g substance
Chemical oxygen demand (COD)	1.51 g O₂/g substance

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ethylene glycol (107-21-1)		
ThOD	1.51 g O ₂ /g substance	
BOD (% of ThOD)	0.015 % ThOD	
denatonium benzoate (3734-33-6)		
Persistence and degradability	Biodegradability in water: no data available. No (test) data on mobility of the substance available.	

12.3. Bioaccumulative potential

ethylene glycol (107-21-1)		
BCF fish 1	10 (72 h; Leuciscus idus)	
BCF other aquatic organisms 1	0.21 - 0.6 (Procambarus sp.; Chronic)	
BCF other aquatic organisms 2	190 (24 h; Algae)	
Log Pow	-1.34 (Experimental value)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500). Not established.	
diethylene glycol (111-46-6)		
Log Pow	-1.98	
Bioaccumulative potential	Bioaccumulation: not applicable.	
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	0.048 N/m (20 °C / 68 °F)
diethylene glycol (111-46-6)	
Surface tension	0.0485 N/m

12.5. Other adverse effects

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

Effect on global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

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.

: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

Hazard labels (DOT)

Transport document description : UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III

UN-No.(DOT) : 3082 DOT NA no. : UN3082

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s.

Department of Transportation (DOT) Hazard

Classes

: 9 - Class 9 (Miscellaneous dangerous materials)



DOT Symbols : G - Identifies PSN requiring a technical name

Packing group (DOT) : III - Minor Danger

DOT Packaging Exceptions (49 CFR 173.xxx) : 155 DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

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DOT Packaging Bulk (49 CFR 173.xxx) : 241
DOT Quantity Limitations Passenger aircraft/rail : No limit

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : No limit

CFR 175.75)

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).

ADR

No additional information available

Transport by sea

UN-No. (IMDG) : Not regulated by IMDG (in quantities under 5,000 lbs in any one inner package)

Air transport

UN-No.(IATA) : Not regulated by IATA (in quantities under 5,000 lbs in any one inner package)

SECTION 15: Regulatory information

15.1. US Federal regulations

PEAK Conventional Green Concentrate Antifr	eeze & Coolant	
EPA TSCA Regulatory Flag		oxic Substances Control Act (TSCA): The intentional gredients of this product are listed
ethylene glycol (107-21-1)		
Listed on the United States TSCA (Toxic Substat Listed on United States SARA Section 313	nces Control Act) inve	ntory
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb(s)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Ethylene glycol is subject to Tier 1 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		
denatonium benzoate (3734-33-6)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		

15.2. International regulations

CANADA

PEAK Conventional Green Concentrate Antifreeze & Coolant	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

WHMIS Classification



Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

EU-Regulations

No additional information available

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Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

PEAK Conventional Green Concentrate Antifreeze & 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

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

SECTION 16: Other information

Full text of H-phrases:

tt of 11 pinaoco.		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
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 : 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
Physical : 0 Minimal Hazard

Personal Protection : B

SDS GHS US (GHS HazCom 2012) OWI

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