

# Safety Data Sheet



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Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Evans High Performance Waterless Engine Coolant

### Other means of identification

**SDS #** 004

### Recommended use of the chemical and restrictions on use

**Recommended Use** Coolant.

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Evans Cooling Systems, Inc.  
1 Mountain Rd.  
Suffield, CT 06078  
www.evanscooling.com

### Emergency Telephone Number

**Company Phone Number** 860-668-1114  
**Emergency Telephone (24 hr)** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Yellow liquid

**Physical State** Liquid

**Odor** Faint sweet

### Classification

Acute toxicity - Oral	Category 4
Reproductive toxicity	Category 2
Specific Target Organ Toxicity – Repeated Exposure	Category 2

### Signal Word

**Warning**

### Hazard Statements

Harmful if swallowed  
Suspected of damaging fertility or the unborn child  
May cause damage to kidneys through prolonged or repeated exposure



**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not breathe mist or vapors

**Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Ethylene glycol	107-21-1	80-85
2-Ethylhexanoic acid	149-57-5	<1
Sodium Nitrate	7631-99-4	<1

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>General Advice</b>	Provide this SDS to medical personnel for treatment.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Call a poison center or doctor/physician if you feel unwell. Rinse mouth.

**Most important symptoms and effects**

<b>Symptoms</b>	Harmful if swallowed. Ingestion of ethylene glycol may cause abdominal pain, nausea, vomiting, dizziness, drowsiness, weakness, blurring of vision, irritability, back pain, decrease in urine output, kidney failure, and central nervous system effects, including irregular eye movements, convulsions and coma. Severe kidney injury may occur. May be fatal if large amount are swallowed. Contact with eyes may cause slight transient irritation seen as excessive redness. Prolonged or repeated contact with skin may cause flaking, tenderness and softening of the skin. No adverse inhalation effects are expected under normal use conditions. If significant vapors or mists are inhaled, exposure may result in irritation to the upper respiratory system.
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**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician**                      Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Water spray (fog). Foam. Dry chemical.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Not determined.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to keep fire-exposed containers cool.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions**                      Use personal protective equipment as required.

**Environmental Precautions**              See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

**Methods for Containment**                Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up**                      Spread granular absorbent. Sweep up and place in container for disposal. Comply with spill all local notification requirements. All response activities must comply with HAZWOPER (29CFR 1910.120). Dispose of contents/container to an approved waste disposal plant.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on Safe Handling**                      Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Wash face, hands, and any exposed skin thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**                          Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up.

**Incompatible Materials**                      Oxidizers.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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Ethylene glycol 107-21-1	Ceiling: 100 mg/m <sup>3</sup> aerosol only	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m <sup>3</sup>	-
2-Ethylhexanoic acid 149-57-5	TWA: 5 mg/m <sup>3</sup> inhalable fraction and vapor	-	-
Sodium Nitrate 7631-99-4	-	-	-

**Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits. Showers. Eyewash stations. Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Eye protection must be provided in accordance with OSHA regulations (29 CFR 1910.133), ANSI Z87.1, or European Standard EN 166, as applicable.

**Skin and Body Protection** Rubber or PVC gloves. Suitable protective clothing.

**Respiratory Protection** Not normally needed during intended usage and handling. However, if exposure causes irritation during routine or non-routine application of product, use NIOSH/MSHA approved respiratory protection (refer to 29CFR 1910.134).

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	Faint sweet
<b>Appearance</b>	Yellow liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Yellow		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	190.6 °C / 375 °F	
Flash Point	120 °C / 248 °F	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid- Not Applicable	
Upper Flammability Limits	22%	
Lower Flammability Limit	3%	
Vapor Pressure	0.7	@ 80°C (176°F)
Vapor Density	>1	(Air=1)
Specific Gravity	Not determined	
Water Solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	
Additional Information	Specific Heat (@ 212°F) : 2870/kg K	
Density	1.113 kg/m <sup>3</sup> @20°C	

**10. STABILITY AND REACTIVITY**

**Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous Polymerization**      Hazardous polymerization does not occur.

**Conditions to Avoid**

Keep out of reach of children.

**Incompatible Materials**

Oxidizers.

**Hazardous Decomposition Products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

**Eye Contact**      Avoid contact with eyes.

**Skin Contact**      Avoid contact with skin.

**Inhalation**      Avoid breathing vapors or mists.

**Ingestion**      Harmful if swallowed.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethylene glycol 107-21-1	4000 - 10200 mg/kg ( Rat )	= 9530 µL/kg ( Rabbit ) = 10600 mg/kg ( Rat )	-
2-Ethylhexanoic acid 149-57-5	= 1600 mg/kg ( Rat )	= 1140 mg/kg ( Rabbit )	-
Sodium Nitrate 7631-99-4	= 1267 mg/kg ( Rat )	-	-

**Information on physical, chemical and toxicological effects**

**Symptoms**      Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity**      Nitrate or nitrite ingested under conditions that result in endogenous nitrosation are considered IARC group 2A carcinogens.

**Chronic Exposure**      Ingestion of ethylene glycol may damage the kidneys.

Chemical Name	ACGIH	IARC	NTP	OSHA
Sodium Nitrate 7631-99-4		Group 2A		X

**Legend**

**ACGIH (American Conference of Governmental Industrial Hygienists)**  
 A3 - Animal Carcinogen  
**IARC (International Agency for Research on Cancer)**  
 Group 2A - Probably Carcinogenic to Humans  
**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**  
 X - Present

**Reproductive toxicity** Suspected of damaging fertility or the unborn child.

**Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethylene glycol 107-21-1	6500 - 13000: 96 h Pseudokirchneriella subcapitata mg/L EC50	41000: 96 h Oncorhynchus mykiss mg/L LC50 14 - 18: 96 h Oncorhynchus mykiss mL/L LC50 static 27540: 96 h Lepomis macrochirus mg/L LC50 static 40761: 96 h Oncorhynchus mykiss mg/L LC50 static 16000: 96 h Poecilia reticulata mg/L LC50 static 40000 - 60000: 96 h Pimephales promelas mg/L LC50 static	EC50 = 10000 mg/L 16 h EC50 = 620 mg/L 30 min EC50 = 620.0 mg/L 30 min	46300: 48 h Daphnia magna mg/L EC50
2-Ethylhexanoic acid 149-57-5	61: 72 h Desmodesmus subspicatus mg/L EC50 41: 96 h Desmodesmus subspicatus mg/L EC50	70: 96 h Pimephales promelas mg/L LC50	EC50 = 110 mg/L 17 h EC50 = 670 mg/L 30 min	85.4: 48 h Daphnia magna mg/L EC50
Sodium Nitrate 7631-99-4		2000: 96 h Lepomis macrochirus mg/L LC50 static 994.4 - 1107: 96 h Oncorhynchus mykiss mg/L LC50 static		

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Chemical Name	Partition Coefficient
Ethylene glycol 107-21-1	-1.93
2-Ethylhexanoic acid 149-57-5	2.7
Sodium Nitrate 7631-99-4	-3.8

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

**Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Sodium Nitrate 7631-99-4	Toxic Ignitable Reactive

**14. TRANSPORT INFORMATION**

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT** Not regulated. Containers with 5000 lbs of ethylene glycol or more must be shipped as Hazmat.

**IATA** Not regulated

**IMDG** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Ethylene glycol	Present	X		Present		Present	X	Present	X	X
2-Ethylhexanoic acid	Present	X		Present		Present	X	Present	X	X
Sodium Nitrate	Present	X		Present		Present	X	Present	X	X

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

**US Federal Regulations**

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ethylene glycol 107-21-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Ethylene glycol - 107-21-1	107-21-1	80-85	1.0
Sodium Nitrate - 7631-99-4	7631-99-4	<1	1.0

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**US State Regulations**

**California Proposition 65**

This product contains ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm if ingested.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethylene glycol 107-21-1	X	X	X
2-Ethylhexanoic acid 149-57-5	X	X	
Sodium Nitrate 7631-99-4	X	X	X

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	2	1	0	None
<b>HMIS</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	2	1	0	B

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**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**