Safety Data Sheet

Issue Date: 29 September 2014 **Revision Date:** 4 January 2017 **Version** 3

1. IDENTIFICATION

Product Identifier

Product Name Evans Heavy Duty Waterless Engine Coolant
Product Number EC61001, EC61055, EC61250

Other means of identification

SDS # 003

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 Orange 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 vapor

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	74-90%
Potassium 2-Ethylhexanoate	3164-85-0	<4%
Potassium Neodecanoate	26761-42-2	<2%
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

General Advice Provide this SDS to medical personnel for treatment.

Eye Contact Rinse thoroughly with plenty of water for several minutes, lifting lower and upper eyelids. Get medical attention if irritation persists.

Skin Contact Remove contaminated clothing. Wash off immediately with plenty of soap and water. Get medical attention if irritation persists.

Inhalation Remove to fresh air. If irritation develops or breathing is difficult, get medical attention.

Ingestion Rinse mouth with water. Do not induce vomiting unless directed by medical personnel. Get medical attention.

Most important symptoms and effects

Symptoms Contact with eyes may cause slight transient irritation. Prolonged or repeated contact with skin may cause irritation. If significant vapors or mists are inhaled, exposure may result in irritation to the upper respiratory system. Harmful if swallowed. Ingestion of ethylene glycol may cause abdominal pain, nausea, vomiting and central nervous system effects. Severe kidney injury may occur. Suspected of causing reproductive effects based on animal data.

Indication of any immediate medical attention and special treatment needed

No immediate medical attention is required.

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, /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
Ethylene glycol 107-21-1	Ceiling: 100 mg/m^3 aerosol only	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m^3	None Established
Potassium 2-Ethylhexanoate 3164-85-0	None Established	None Established	None Established
Potassium Neodecanoate 26761-42-2	None Established	None Established	None Established
Sodium Nitrate 7631-99-4	None Established	None Established	None Established

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 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

Physical State	Liquid		
Appearance	Orange Liquid	**Odor**	Faint sweet
Color	Orange	**Odor Threshold**	Not determined

Property	Values	Remarks • Method
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 mm Hg @ 20° C (60°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
Density	1.008 @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
None known.

Incompatible Materials
Avoid oxidizing agents.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Contact with eyes may cause slight transient irritation seen as excessive redness.

Skin Contact Prolonged or repeated contact with skin may cause flaking, tenderness and softening of the skin.

Inhalation 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.

Ingestion 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 amounts are swallowed.

Information on physical, chemical and toxicological effects

Symptoms 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. 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 amounts are swallowed. Suspected of causing reproductive effects based on animal data

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. None of the other components in this product are listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH or OSHA.

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

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

Chronic Exposure Ingestion of ethylene glycol may damage the kidneys.

Reproductive toxicity Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses.

Numerical measures of toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Ethylene glycol 107-21-1	7712 mg/kg (Rat)	>3500 mg/kg (mouse)	>2.5 mg/L/6 hr (rat)
Potassium 2-Ethylhexanoate 3164-85-0	= 2043 mg/kg (rat)	= >2000 mg/kg (rat)	- No data available
Potassium Neodecanoate 26761-42-2	No data available	No data available	No data available
Sodium Nitrate 7631-99-4	3430 mg/kg (rat)	->5000 mg/kg (rat)	- No data available

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	Crustacea
Ethylene glycol 107-21-1	96 h EC50 Pseudokirchneriella subcapitata 6500 – 13000 mg/L	96 hr LC50 Pimephales promelas 72,860 mg/L	48 hr EC50 Daphnia magna >100 mg/L
Potassium 2-Ethylhexanoate 3164-85-0	72 h EC50 Desmodesmus subspicatus 649.3 mg/L	96 hr LC50 Oryzias latipes >100 mg/L	48 h EC50 Daphnia magna 85.4 mg/L
Potassium Neodecanoate 26761-42-2	No data available	No data available	No data available
Sodium Nitrate 7631-99-4	No data available	96 hr LC50 Oncorhynchus mykiss >100 mg/L	48 hr EC50 daphnia magna 3581 mg/L

Persistence/Degradability

Chemical Name	Biodegrradibility
Ethylene glycol 107-21-1	Readily Biodegradable
Potassium 2-Ethylhexanoate 3164-85-0	Readily Biodegradable

Bioaccumulation

Chemical Name	Partition Coefficient
Ethylene glycol 107-21-1	-1.93
Sodium Nitrate 7631-99-4	-3.8

Mobility
Ethylene is highly mobile in soil.

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 (in container <5000 lbs) Not regulated.

DOT (in container >5000 lbs) UN3082, Environmentally hazardous substance, liquid, n.o.s. (Ethylene glycol), 9 PG III, RQ

TDG Not regulated.

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	DSL	EINECS	ENCS	IECSC	KECL	PICCS	AICS	NZIoC	NECI
Present		Present							

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*

NZIoC *New Zealand Inventory of Chemicals*

NEIC *– Taiwan New and Existing Inveotory of Chemicals*

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	74-90%	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
Potassium 2-Ethylhexanoate 3164-85-0	-	-	-
Potassium Neodecanoate 26761-42-2	-	-	-
Sodium Nitrate 7631-99-4		X	X

16. OTHER INFORMATION

NFPA	**Health Hazards**	**Flammability**	**Instability**	**Special Hazards**
	2	1	0	None
HMIS	**Health Hazards**	**Flammability**	**Physical Hazards**	**Personal Protection**
	2	1	0	B

Issue Date: 29 September 2014
Revision Date: 4 January 2017
Revision Note: Header, Section 9 Vapor Pressure, Specific Gravity

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