



Material Safety Data Sheet

Section 1: Product & Company Identification

Product Name: EnginKool™ Engine Cooling System

Product Number (s): 05348

Manufactured By:

CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com

General Information	(215) 674-4300
Technical Assistance	(800) 521-3168
Customer Service	(800) 272-4620
24-Hr Emergency (CHEMTREC)	(800) 424-9300

Section 2: Hazards Identification

Emergency Overview

Appearance & Odor: Light green liquid, pleasant odor

As defined by OSHA's Hazard Communication Standard, this product is non-hazardous.

Potential Health Effects:

- EYE:** May cause mild irritation to the eyes. Effects should be temporary.
- SKIN:** Brief contact may cause mild irritation. Prolonged contact may cause dermatitis or defatting of the skin and local redness. May be absorbed through the skin and cause toxic effects.
- INHALATION:** No health effects expected under normal conditions of use. High concentrations of vapors or mists may cause irritation to the nose and throat, headache, drowsiness, nausea, euphoria and other signs of central nervous system depression.
- INGESTION:** Can cause central nervous system symptoms similar to those by inhalation, followed by rapid breathing, increased heart rate, possible toxicity to the kidneys, decreased urine volume and severe metabolic acidosis.
- CHRONIC EFFECTS:** Unknown
- TARGET ORGANS:** kidney, liver

Medical Conditions Aggravated by Exposure: Unknown

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Water	7732-18-5	75 - 85
Ethylene glycol	107-21-1	< 10
Polyalkylene glycol monobutyl ether	9038-95-3	3 - 8
Sodium nitrite	7632-00-0	3 - 8
Ethoxylated castor oil	61791-12-6	1 - 5

Section 4: First Aid Measures

- Eye Contact:** Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.
- Skin Contact:** Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.
- Inhalation:** Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.
- Ingestion:** Give victim a glass of water and then attempt to induce vomiting. If vomiting does occur, have victim lean forward to reduce risk of aspiration. Immediately seek medical attention.

Note to Physicians: This product contains ethylene glycol.

Section 5: Fire-Fighting Measures

Flammable Properties: As defined by OSHA, this product is not flammable.

Flash Point:	None (TCC)	Upper Explosive Limit:	ND
Autoignition Temperature:	ND	Lower Explosive Limit:	ND

Suitable Extinguishing Media: Class B fire extinguishers or as appropriate for the surrounding fire.

Products of Combustion: If heated, product may produce carbon oxides and nitrogen oxides.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains. This product may be harmful to aquatic life.

Methods for Containment & Clean-up: Dike area to contain spill. Ventilate the area with fresh air. If in confined space, clean-up workers may need to consider respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Avoid contact with eyes, skin and clothing. Properly clean any spilled residue immediately. Wash hands after use and before handling food items. Use with adequate ventilation. Do not use near sources of ignition.

Storage Procedures: Store in a cool dry area out of direct sunlight. Keep containers closed when not in use. Store out of reach of children and pets.

Aerosol Storage Level: NA

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Water	NE	NE	NE	NE	NE		
Ethylene glycol	NE	NE	NE	100(c)	NE		mg/m ³
Polyalkylene glycol monobutyl ether	NE	NE	NE	NE	NE		
Sodium nitrite	NE	NE	NE	NE	NE		
Ethoxylated castor oil	NE	NE	NE	NE	NE		
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated							

Engineering Controls: Area should have ventilation to provide fresh air. Use local exhaust to prevent accumulation of vapors. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations

Respiratory Protection: None required for normal work where adequate ventilation is provided. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile, neoprene or rubber if prolonged contact with liquid is expected or if you have sensitive skin.

Section 9: Physical and Chemical Properties

Physical State: liquid

Color: light green

Odor: pleasant odor

Specific Gravity: 1.062

Initial Boiling Point: 212 F

Freezing Point: ND
Vapor Pressure: ND
Vapor Density: > 1 (air = 1)
Evaporation Rate: < 1 (ether = 1)
Solubility: Soluble in water
pH: 11.0
Volatile Organic Compounds: wt %: 0 g/L: 0 lbs./gal: 0

Section 10: Stability and Reactivity

Stability: Stable
Conditions to Avoid: None
Incompatible Materials: Strong oxidizers, acids
Hazardous Decomposition Products: Oxides of carbon and nitrogen
Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

ACUTE EFFECTS

<u>Component</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
Sodium nitrite	LD50	157.9 mg/kg	Oral	Rat
Ethylene glycol	LD50	9530 uL/kg	Dermal	Rabbit
Ethylene glycol	LD50	4700 mg/kg	Oral	Rat

CHRONIC EFFECTS**Carcinogenicity:**

	<u>Component</u>	<u>Result</u>
OSHA:	None listed	
IARC:	None listed	
NTP:	None listed	

Mutagenicity: No information available

Other: None

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: No information available.
Persistence / Degradability: Moderately biodegradable
Bioaccumulation / Accumulation: No information available.
Mobility in Environment: No information available.

Section 13: Disposal Considerations

Disposal: This material is not a RCRA hazardous waste. (See 40 CFR Part 261.20 – 261.33)
Wastes should be collected and properly disposed. Do not dump into bodies of water or on the ground.

All disposal activities must comply with federal, state and local regulations. Local regulations may be more stringent than state or national requirements.

Section 14: Transport Information

Proper shipping description:

US DOT (ground): Not Regulated

Special Provisions: None

Section 15: Regulatory Information

U.S. Federal

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: Sodium nitrite (100 lbs)
Ethylene glycol (5000 lbs)

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:	Fire Hazard	No
	Reactive Hazard	No
	Release of Pressure	No
	Acute Health Hazard	Yes
	Chronic Health Hazard	No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
Sodium nitrite (< 6%); glycol ethers (9.2%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): Ethylene glycol

Consumer Product Safety Act General Conformity Certification: This product was evaluated by CRC Industries, Inc., and is certified to be in compliance with the provisions of the Consumer Product Safety Act, the Federal Hazardous Substances Act and the Poison Prevention Packaging Act, as applicable. This product was manufactured at the location listed in Section 1 of this MSDS. The date of manufacture is stamped on the product container. No testing is required to certify compliance with the above

State RegulationsCalifornia Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm:

propylene oxide (< 4 ppm)
ethylene oxide (< 0.3 ppm)

State Right to Know:

New Jersey: 7632-00-0, 107-21-1
 Pennsylvania: 7632-00-0, 107-21-1
 Massachusetts: 7632-00-0, 107-21-1
 Rhode Island : 107-21-1

Additional Regulatory Information: None

Section 16: Other Information

NFPA: Health: 1 Flammability: 0 Reactivity: 0
 HMIS: Health: 1 Flammability: 0 Reactivity: 0 PPE: B

Prepared By: Michelle Rudnick
 CRC #: 614A
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Changes since last revision: Section 15: CPSA Certification added

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label.

CAS:	Chemical Abstract Service	NA:	Not Applicable
ppm:	Parts per Million	ND:	Not Determined
TCC:	Tag Closed Cup	NE:	Not Established
PMCC:	Pensky-Martens Closed Cup	g/L:	grams per Liter
PPE:	Personal Protection Equipment	lbs./gal:	pounds per gallon
TWA:	Time Weighted Average	STEL:	Short Term Exposure Limit
OSHA:	Occupational Safety and Health Administration		
ACGIH	American Conference of Governmental Industrial Hygienists		
NIOSH	National Institute of Occupational Safety & Health		