



**Tal-Cool™ HEAVY DUTY ES -- ANTIFREEZE/COOLANT**

**Section 5. Fire Fighting Measures**

Flash Point: > 220 °F Method Used: Closed Cup  
Flammable Limits in Air % by Volume: LEL: 3.2 UEL: N/E  
Extinguisher Media: Water spray, dry chemical, carbon dioxide or alcohol resistant foam.  
Special Fire Fighting Procedures: Firefighters should wear a self-contained breathing apparatus with a full facepiece operated in pressure demand or other positive pressure mode, and protective clothing.  
Unusual Fire And Explosion Hazards: Do not release runoff from fire control methods to sewers or waterways. Keep fire exposed containers cool and reduce vapors with water spray.

**Section 6. Accidental Release Measures**

SMALL SPILL Absorb on inert material and place in closed container for proper disposal.  
LARGE SPILL Dike to prevent contamination of waterways or going to sewer. Spills and releases may have to be reported to Federal and/or local authorities.  
CERLA (Superfund) Reportable Quantity (in lbs): RQ - Ethylene glycol - 5,000 lbs. (Product RQ = 5,325 lbs)

**Section 7. Handling and Storage**

Handling: Avoid contact with skin and eyes; wash thoroughly after handling. Avoid breathing vapor; use with adequate ventilation.  
Storage: Store in a dry location at room temperature. Keep container closed and maintain all original markings and labels.  
Other: Do not reuse container without recycling or reconditioning. Handle empty containers as if they were full.

**Section 8. Exposure Controls and Personal Protection**

Respiratory Protection: Not required under normal conditions of use.  
Local Exhaust: None normally required. Local exhaust may be needed under special circumstances such as poorly ventilated areas, evaporation from large surfaces, spraying, heating, etc.  
Mechanical Exhaust: Mechanical ventilation should be sufficient to maintain exposure levels below exposure limits.  
Protective Gloves: Wear chemical resistant gloves.  
Eye Protection: At a minimum, wear safety glasses with side shields.  
Other Protection: Eye wash and safety shower should be readily available.  
Hygienic Practices: Avoid contact with skin and avoid breathing vapors or mist. Do not eat, drink, or smoke while using this product. Wash up prior to eating, drinking, or using the restroom.

**Section 9. Physical and Chemical Properties**

Boiling Point:	> 212 °F	Degree of water solubility:
Specific Gravity (H <sub>2</sub> O=1):	1.11-1.145	Negligible = Less than 0.1%
Vapor Pressure (mm Hg):	N/E	Slight = 0.1% - 1%
Vapor Density (air=1)	N/E	Moderate = 1% - 10%
Solubility in Water:	Complete	Appreciable = More than 10%
Reactivity in Water:	None	Complete = 100%
Weight per Gallon (lb/gal):	9.3 - 9.5 lbs/gal	
% Volatile by Volume:	N/E	
% Solid by Weight:	N/E	
Appearance and Odor:	Yellow liquid with a characteristic odor.	

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Theoretical VOC: N/E  
(>0.1 mm Hg @ 20 ° C)  
Analytical VOC : N/E  
(EPA method 24)  
pH: 7.5-9.0

**Section 10. Stability and Reactivity**

Stability: Stable. Hazard Polymerization: Will not occur.  
Conditions to Avoid: None known.  
Incompatibility (Materials to Avoid): None known.  
Hazardous Decomposition Products: Incomplete combustion can generate hazardous gases.

**Section 11. Toxicological Information**

Ethylene glycol [CASRN 000107-21-1]

ACUTE EFFECTS: Skin Irritation (rabbit): >1.00 ÷ 2.00 g/kg Slight

SUBCHRONIC AND CHRONIC EFFECTS: Continuous ingestion of a diet if 1% to 2% ethylene glycol for two years produced liver and kidney stones and bladder stones in rats.

Diethylene glycol [CASRN 000111-46-6]

ACUTE TOXICITY Oral LD50 (rat) = 20.75 g/kg  
Dermal LD50 (rabbit) = 13.3 g/kg

SKIN: A single prolonged exposure is not likely to result in the material being absorbed through skin in harmful amounts. Repeated skin exposure may result in absorption of harmful amounts. Massive contact with damaged skin or of material sufficiently hot to burn skin may result in absorption of potentially lethal amounts.

INGESTION: Oral toxicity is expected to be moderate in humans even though test with animals show a lower degree of toxicity. Small amounts swallowed incidental to normal handling operation are not likely to cause injury. However, swallowing amount larger than that may cause serious injury or even death. Repeated excessive exposures may cause sever kidney and also liver and gastrointestinal effects. Observations in animals include formation of bladder stones after repeated oral doses.

SIGNS & SYMPTOMS: Include CNS, nausea and/or vomiting; may be anesthetic or narcotic effects.

**Section 12. Ecological Information**

Ethylene glycol [CASRN 000107-21-1]

ECOTOXICITY LC50-96 Hr Aquatic toxicity rating is believed to be > 100.00 mg/liter practically non-toxic.

**Section 13. Disposal Considerations**

Waste Disposal Methods (Federal, State, Local):

Recycle where possible. Disposal must comply with federal, state and local laws.  
Individual consumers are encouraged to inquire about local or state run Household Hazardous Waste programs.

RCRA Hazardous Waste Number: N/A

**Section 14. Transport Information**

Hazardous Material Description:

(Proper shipping name, hazard class, hazard ID#, packing group)

Domestic ground non-bulk: NOT REGULATED

Domestic ground bulk: RQ ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, 9,  
UN3082, PG III (ETHYLENE GLYCOL)

International: NOT REGULATED

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**Section 15. Regulatory Information**

**SARA 313 Information** This product contains the following chemical(s) above de minimis concentrations and may be subject to reporting under section 313:

Ethylene glycol, CAS # 107-21-1, > 90%

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**Section 16. Other Information**

This MSDS contains revisions in the following sections: New format

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The development of this Material Safety Data Sheet (MSDS) relies upon information provided to us by each of our raw material suppliers. This MSDS will be updated as changes occur to their MSDS(s).

We believe the recommendations and technical information contained herein to be accurate. However, they are given without warranty or guarantee, expressed or implied, and we assume no responsibility for losses or damage, direct or indirect, as a result of their use.