

MSDS - Material Safety Data Sheet**Product Name: AUTO TRUCK DE-ICER**

MSDS No.: DE1

I. Basic Information:**Manufacturer:** RADIATOR SPECIALTY COMPANY**Address:** 600 RADIATOR ROAD**City, ST Zip:** INDIAN TRAIL, NC 28079**Country:****Contact:** Robert Geer**Information Telephone Number:** 704-684--181 1**Emergency Contact:** Rocky Mountain Poision Control Center**Emergency Telephone Number:** 303-623-5716**Emergency Restrictions:****Product Name:** AUTO TRUCK DE-ICER**MSDS No.:** DE1**Issue Date:** 09/12/2008**Supersedes Date:** 01/18/2008**II. Hazards Identification:****EMERGENCY OVERVIEW**

POISON. May be Fatal or cause Blindness if Swallowed. Flammable. Vapor Harmful. Eye and Skin Irritant. Contents Under Pressure.

Level 1 Aerosol

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Health Effects**Route(s) of Entry:**

Absorption, Eye, Inhalation, and Ingestion.

Health Hazards (Acute and Chronic):

Reports have associated repeated and prolonged over-exposure to solvents with permanent brain and nervous system damage. Methanol is a poisonous, narcotic chemical and if ingested can cause blindness and death.

Signs and Symptoms:

Eye Contact: May be irritating to eyes

Skin Contact: Prolonged exposure may cause dermatitis..

Inhalation: Repeated exposure may cause narcosis.

Ingestion: Poison, May cause death or blindness.

Medical Conditions Generally Aggravated by Exposure:

Over-exposure may cause central nervous system depression.

Other Health Warnings:

None Known

Potential Environmental Effects

Not Available

III. Composition/Information on Ingredients:

Chemical Name	CAS No.	% Range	Trade Secret
Carbon dioxide	124-38-9	1.0 - 5.0	
Ethylene glycol	107-21-1	1.0 - 5.0	
Methanol	67-56-1	40.0 - 70.0	
Morpholine	110-91-8	0.1 - 1.0	

IV. First Aid Measures:**Emergency and First Aid Procedures:**

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Eye Contact: Flush eyes with clean water for 15 minutes while lifting eyelids. Get prompt medical attention.

Skin Contact: Wash with soap and water thoroughly. If adverse effects persist, get prompt medical attention. Launder contaminated clothing before reuse.

Inhalation: Remove to fresh air. If breathing becomes difficult get prompt medical attention.

Ingestion: DO NOT INDUCE VOMITING! Call Poison Control Center, physician, or hospital emergency room immediately.

Note to Physicians:

N/E

V. Fire Fighting Measures:

Suitable Extinguishing Media:

Water Fog, Foam, Carbon Dioxide, Dry Chemical

Unsuitable Extinguishing Media:

Do not use forced water stream as this could cause the fire to spread.

Products of Combustion:

Carbon monoxide, carbon dioxide may form during combustion.

Protection of Firefighters:

Wear self-contained positive pressure breathing apparatus and protective clothes. Use shield to protect from rupturing and venting containers. At elevated temperatures containers may vent, rupture or burst, even violently

VI. Accidental Release Measures:

Personal Precautions:

Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

Environmental Precautions:

Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred. Run off to sewer may create fire or explosion hazard.

Methods for Containment:

Dike or contain spill and absorb with inert materials (sand, sawdust, absorbent sweeping compounds, rags, etc).

Methods for Cleanup:

Using a non-metallic scoop, place contaminated material into an approved chemical waste container. Where possible, vacuum spilled liquid using an explosion proof vacuum to recover material.

Other Information:

Prevent run-off to sewers, streams, or other bodies of water. If run-off occurs, notify proper authorities as required that a spill has occurred.

VII. Handling and Storage:

Handling Precautions:

Use with adequate ventilation and proper protective equipment.

Do not use or store near fire, sparks, or open flame. Do not puncture or incinerate container. Exposure to temperatures above 120° may cause container to vent, rupture, or burst.

POISON. May be Fatal or cause Blindness if Swallowed. Product can not be made non-poisonous.

Storage Precautions:

Avoid contact with oxidizing agents. Avoid contact with eyes. Avoid prolonged or repeated breathing of vapors.

VIII. Exposure Controls/Personal Protection:

Chemical Name	OSHA PEL	ACGIH TLV	Other Limits
Methanol	200 PPM	200 PPM	Not Available
Ethylene glycol	50 ppm	100 mg/m3	Not Available
Carbon dioxide	N/AV	5000 ppm	Not Available
Morpholine	20 PPM	20 PPM	Not Available

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Engineering Controls:

See above Section for applicable exposure limits. In restricted areas, use approved chemical/mechanical filters designed to remove a combination of particles and vapor. In confined areas, use approved air line type respirator or hood. A self-contained breathing apparatus is required for vapor concentrations above TLV limits.

Personal Protective Equipment:

Maintain adequate ventilation. Avoid breathing vapors. For prolonged exposure wear protective safety glasses, gloves, and apron.

IX. Physical and Chemical Properties:

Boiling Point: 148°F

Boiling Range: Not Available

Solubility In Water: Infinite

Flash Point: 54°F

Odor Threshold: Not Available

Vapor Density (AIR = 1): 1.11

pH Range: Not Available

Decomposition Temp: Not Available

Lower Explosive Limit: 6.0

Specific Gravity (H2O = 1): 0.79

Other Information: N/D

Melting Point: N/A

Freezing Point: Not Available

Evaporation Rate (Butyl Acetate = 1): 5.9

Flash Point Method: TCC

Appearance and Odor: Clear liquid with alcohol odor

Vapor Pressure (mm Hg.): N/D

Partition Coefficient: Not Available

Auto-Ignition Temp: Not Available

Upper Explosive Limit: 36.5

X. Stability and Reactivity:

Stability:

Stable

Conditions to Avoid:

See Incompatible Materials below.

Incompatible Materials:

Strong oxidizing agents, will attack some forms of plastics and rubber.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide may form during combustion.

Possibility of Hazardous Reactions:

Will not occur.

XI. Toxicological Information:

N/D

XII. Ecological Information:

N/D

XIII. Disposal Considerations:

DISPOSAL: This container may be recycled in aerosol recycling centers when empty. Before offering for recycling, empty the can by using the product according to the label. DO NOT PUNCTURE! If recycling is not available, wrap the container and discard in the trash. Dispose of unused product in accordance with all local, state government and federal laws and regulations.

XIV. Transport Information:

Shipping Name: Not Available

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DOT Hazard Class: Not Available

DOT Subsidiary Hazard Class: Not Available

UN/NA#: Not Available

Packing Group: Not Available

Transportation Information:

DOT Hazard Class: ORM-D
Shipping Name: Consumer Commodity

The DOT description is provided to assist in the proper shipping classification of this product and may not be suitable for international and air shipping purposes.

ICAO/IATA (US)
Shipping Name: Aerosols
Class: 2.2
UN number: UN1950

International:

ICAO/IATA
UN number: UN1950
Shipping Name: Aerosols
Class: 2.2

IMDG
UN number: UN1950
Shipping Name: Aerosols
Class: 2.2
EmS: F-D, S-U

XV. Regulatory Information:

SARA 313 Reportable Chemicals:
Methanol - 67-56-1
Ethylene Glycol - 107-21-1

USA TSCA: All components of this material are listed on the US TSCA Inventory.

Warning: This product contains a chemical(s) known to the State of California to cause cancer or birth defects or other reproductive harm.

State RTK Chemicals:
Morpholine - 110-91-8
Methanol - 67-56-1
Ethylene Glycol - 107-21-1

XVI. Other Information:

- Chemical State:** Liquid Gas Solid
- Chemical Type:** Pure Mixture
- Hazard Category:**
- Acute Chronic Fire
- Pressure Reactive

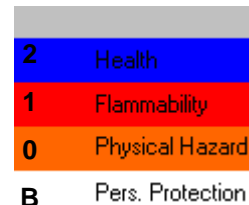


Additional Manufacturer Warnings:

Do not used in confined area without proper ventilation. Contact lenses may cause further damage in case of splash into eye. KEEP AWAY FROM CHILDREN AND ANIMALS!

N/E: Not Established
N/D: Not Determined
N/A: Not Applicable
N/AV: Not Available

Additional Product Information:



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