

MSDS - Material Safety Data Sheet**Product Name: MASS AIR FLOW SENSOR CLEANER**

MSDS No.: MAS7

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 Poison and Drug Center**Emergency Telephone Number:** 303-623-5716**Emergency Restrictions:****Product Name:** MASS AIR FLOW SENSOR CLEANER**MSDS No.:** MAS7**Issue Date:** 05/10/2010**Supersedes Date:** 08/25/2008**II. Hazards Identification:****EMERGENCY OVERVIEW**

Danger: Extremely Flammable, Harmful or fatal if swallowed, Vapor harmful, Contents under pressure.

Level 3 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:**

Inhalation, eye and skin contact.

Health Hazards (Acute and Chronic):

See signs and symptoms below

Signs and Symptoms:

Eye Contact: Direct spray or vapors will irritate and may harm eyes

Skin Contact: Product may cause irritation due to defatting of skin.

Inhalation: High concentrations of vapors may irritate nose and throat and cause symptoms of intoxication such as dizziness, nausea, headache, or indigestion.

Ingestion: May cause blindness if swallowed. Causes irritation, narcosis, and liver and kidney damage.

Medical Conditions Generally Aggravated by Exposure:

None Known

Other Health Warnings:

Vomiting and subsequent aspiration into the lungs may lead to chemical pneumonia and pulmonary edema which is a potentially fatal condition.

Potential Environmental Effects

Not Available

III. Composition/Information on Ingredients:

Chemical Name	CAS No.	% Range	Trade Secret
Difluoroethane	75-37-6	10.0 - 30.0	
Heptane	142-82-5	60.0 - 100.0	

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

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.

MSDS - Material Safety Data Sheet

Product Name: MASS AIR FLOW SENSOR CLEANER

MSDS No.: MAS7

Note to Physicians:

N/D

V. Fire Fighting Measures:

Suitable Extinguishing Media:

Foam, Dry Chemical (B-C), Carbon Dioxide

Unsuitable Extinguishing Media:

Water Spray. Use only to keep aerosol containers cool, from bursting.

Products of Combustion:

Carbon monoxide, Carbon dioxide and Hydrocarbons.

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:

Eliminate all ignition sources. 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:

Eliminate all ignition sources. Persons not wearing protective equipment should be excluded from area of spill until clean up has been completed. 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. All equipment used with handling the concentrate must be grounded. Dike or contain spill and absorb with inert materials (sand, sawdust, absorbent sweeping compounds, rags, etc). 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. 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. Wash hands after handling product. Do not use or store near fire, sparks, or open flame. Do not puncture or incinerate container. Contact lenses may cause further damage in case of splash into eye. KEEP AWAY FROM CHILDREN AND ANIMALS!

Storage Precautions:

Store in proper ventilated area. Exposure to temperatures above 120° may cause container to vent, rupture, or burst. Do not store with oxidizers.

VIII. Exposure Controls/Personal Protection:

Chemical Name	OSHA PEL	ACGIH TLV	Other Limits
Heptane	500 ppm	400 ppm	Not Available
Difluoroethane	N/E	N/E	Not Available

Engineering Controls:

See above Section for applicable exposure limits. Maintain adequate ventilation.

Avoid breathing vapors. 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.

MSDS - Material Safety Data Sheet**Product Name: MASS AIR FLOW SENSOR CLEANER****MSDS No.: MAS7****Personal Protective Equipment:**

For prolonged exposure wear protective safety glasses, gloves, and apron.

IX. Physical and Chemical Properties:**Boiling Point:** > 100°F**Boiling Range:** N/D**Solubility In Water:** Insolubility**Flash Point:** < 0°F**Odor Threshold:** N/D**Vapor Density (AIR = 1):** N/D.**pH Range:** N/A**Decomposition Temp:** N/D**Lower Explosive Limit:** 1.1%**Specific Gravity (H2O = 1):** 0.70**Other Information:** VOC Content: 74%**Melting Point:** - 131°F (-91°C)**Freezing Point:** N/D**Evaporation Rate (Butyl Acetate = 1):** > 1.00**Flash Point Method:** TCC**Appearance and Odor:** Clear liquid with hydrocarbon odor.**Vapor Pressure (mm Hg.):** 40**Partition Coefficient:** N/D**Auto-Ignition Temp:** N/D**Upper Explosive Limit:** 7%**X. Stability and Reactivity:****Stability:**

Product is stable

Conditions to Avoid:

Avoid contact with heat, sparks or flame

Incompatible Materials:

Avoid contact with strong oxidizers

Hazardous Decomposition Products:

Carbon Dioxide, Carbon Monoxide, hydrocarbons.

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

MSDS - Material Safety Data Sheet**Product Name: MASS AIR FLOW SENSOR CLEANER****MSDS No.: MAS7****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 all shipping purposes.

CAO/IATA (US)

UN number 1950

Shipping Name: Aerosols

Class: 2.1

International:

ICAO/IATA

UN number: UN1950

Shipping Name: Aerosols

Class: 2.1

IMDG

UN number: 1950

Shipping Name: Aerosols

Class: 2.1

EMS: F-D, S-U

XV. Regulatory Information:

SARA Reportable Chemicals.

None

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

State RTK Chemicals:

Heptane (142-82-5)

Difluoroethane (75-37-6)

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:

While Radiator Specialty Company believes this data is accurate as of the revision date, we make no warranty with respect to the data and we expressly disclaim all liability for reliance thereon. The data is offered solely for information, investigation, and verification. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this MSDS. The user is responsible for full compliance.

