

MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

Product identifier : **FOAMY RIM CLEANER**

Product Use : Wheel cleaner.

Chemical Family : Mixture of: Water; salts; Surfactant; Propellant.

Manufacturer part no. : FWC22C

Supplier's name and address:
Radiator Specialty Co., of Canada
 1711 Aimco Blvd.
 Mississauga, ON, Canada
 L4W 1H7

Manufacturer's name and address:
 Refer to Supplier

Information Telephone # : (905) 625-9117 (Monday - Friday, 8 AM - 4 PM)

24 Hr. Emergency Tel # : 613-996-6666 (CANUTEC)

SECTION 2 - HAZARDS IDENTIFICATION

Classification : WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). WHMIS classification:
 Class A (Pressurized containers).
 Labelling: Phrases recommended to appear on a supplier label, can be found in Section 15.
 WHMIS symbols required on a supplier label:



Emergency Overview : White foamy spray. Hydrocarbon odour. WARNING! Contents under pressure. Containers may explode if heated. May be harmful if inhaled. May cause nausea, vomiting, headache and other central nervous system effects. May be mildly irritating to eyes and skin.

POTENTIAL HEALTH EFFECTS:

Signs and symptoms of short-term (acute) exposure

- Inhalation* : Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. In extremely high concentrations, product may act as an asphyxiant and cause increased breathing and pulse rates, fatigue and unconsciousness.
- Skin* : May cause mild skin irritation. If product is sprayed directly on skin, symptoms of frostbite may be experienced including numbness, prickling and itching.
- Eyes* : May cause mild eye irritation. If product is sprayed directly into the eyes, could cause freezing of the eye.
- Ingestion* : Not an expected route of entry under normal conditions of use. However, if the product is sprayed directly into mouth and large amounts of the liquid concentrate are swallowed, it may cause irritation to the mouth, throat and stomach.

Effects of long-term (chronic) exposure

- : Prolonged skin contact may cause dermatitis (rash), characterized by red, dry, itching skin.

Carcinogenic status : See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards : See TOXICOLOGICAL INFORMATION, Section 11.

Potential environmental effects

- : See ECOLOGICAL INFORMATION, Section 12.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredients</u>	<u>CAS #</u>	<u>Wt.%</u>
Butane	106-97-8	2.00 - 5.00
Propane	74-98-6	1.00 - 3.00

SECTION 4 - FIRST AID MEASURES

- Inhalation** : Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Get medical attention.
- Skin contact** : Remove contaminated clothing. Wash exposed area thoroughly with soap and water for at least 15 minutes. If irritation persists, seek prompt medical attention.
- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, seek prompt medical attention.
- Ingestion** : Do not induce vomiting. Consult a physician. Never give anything by mouth to an unconscious person.
- Notes For Physician** : Treat symptomatically.

SECTION 5 - FIRE FIGHTING MEASURES**Fire hazards/conditions of flammability**

- : Non-flammable aerosol. Closed containers are contained under pressure and may explode if exposed to excess heat for a prolonged period of time.

Oxidizing properties

- : None known.

Explosion data: Sensitivity to mechanical impact / static discharge

- : Aerosols are sensitive to mechanical impact. Contents under pressure. Will not accumulate static charge.

Suitable extinguishing media : Dry chemical, foam, carbon dioxide and water fog.**Special fire-fighting procedures/equipment**

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Shield personnel to protect from venting or rupturing containers. Water spray may be useful in cooling equipment exposed to heat and flame.

Hazardous combustion products

- : Carbon oxides; Ammonia; Other unidentified organic compounds.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

- Personal precautions** : All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.
- Environmental precautions** : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.
- Spill response/cleanup** : Ventilate area of release. Remove all sources of ignition. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Notify the appropriate authorities as required.
- Prohibited materials** : None known.

SECTION 7 - HANDLING AND STORAGE

- Safe Handling procedures** : Use in a well-ventilated area. Wear suitable protective equipment during handling. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Keep away from heat and flame. Avoid contact with incompatible materials. Do not puncture or incinerate. Wash thoroughly after handling.
- Storage requirements** : Store in a cool, dry, well-ventilated area. Keep away from direct sunlight. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area.
- Incompatible materials** : Strong oxidizing agents; Acids .
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION**Exposure Limits**

<u>Ingredients</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Butane	1000 ppm (Butane, all isomers)	N/Av	800 ppm (final rule limit)	N/Av
Propane	N/Av	N/Av	1000 ppm	N/Av

Ventilation and engineering measures

- : Use in a well-ventilated area. Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.

Respiratory protection

- : If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised. Advice should be sought from respiratory protection specialists.

Skin protection

- : Gloves impervious to the material are recommended. Advice should be sought from glove suppliers. Depending on conditions of use, an impervious apron should be worn.

Eye / face protection

- : Chemical splash goggles are recommended.

Other protective equipment

- : An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations

- : Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Wash contaminated clothing before reuse. Wash hands thoroughly after using this product, and before eating, drinking or smoking.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid aerosol.	Appearance	: White foamy spray.
Odour	: Hydrocarbon odour.	Odour threshold	: N/Av
pH	: 10.5 - 11.5		
Boiling point	: 100°C	Specific gravity	: 1.0 @ 20°C
Melting/Freezing point	: N/Av	Coefficient of water/oil distribution	: N/Av
Vapour pressure (mmHg @ 20° C / 68° F)	: N/Av	Solubility in water	: insoluble
Vapour density (Air = 1)	: N/Av	Evaporation rate (n-Butyl acetate = 1)	: < 1
Volatile organic Compounds (VOC's)	: N/Av	Volatiles (% by weight)	: 89
Flash point	: N/Av		
Flash point Method	: N/Av	Auto-ignition temperature	: Not available.
Lower flammable limit (% by vol.)	: N/Av	Upper flammable limit (% by vol.)	: N/Av
Flame Projection Length	: None.	Flashback observed	: NO
Absolute pressure of container	: N/Av	Viscosity	: N/Av
General Information	: No additional information.		

Section 10: STABILITY AND REACTIVITY

Stability and reactivity	: Stable under the recommended storage and handling conditions prescribed.
Hazardous polymerization	: Hazardous polymerization does not occur.
Conditions to avoid	: Avoid heat and open flame. Keep away from direct sunlight. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.
Materials To Avoid And Incompatibility	: Strong oxidizing agents; Acids.
Hazardous decomposition products	: None known, refer to hazardous combustion products in Section 5.

SECTION 11 - TOXICOLOGICAL INFORMATION

- Target organs** : Eyes, skin, respiratory system.
- Routes of exposure** : *Inhalation:* YES *Skin Absorption:* NO *Skin & Eyes:* YES *Ingestion:* YES
- Irritancy** : Mild.
- Toxicological data** : There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

<u>Ingredients</u>	LC₅₀(4hr) <u>inh, rat</u>	LD₅₀	
		<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Butane	276 000 ppm	N/Ap (gas)	N/Ap (gas)
Propane	N/Av	N/Ap (gas)	N/Ap (gas)

- Carcinogenic status** : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
- Reproductive effects** : Not expected to have other reproductive effects.
- Teratogenicity** : Not expected to be a teratogen.
- Mutagenicity** : Not expected to be mutagenic in humans.
- Epidemiology** : None known or reported by the manufacturer.
- Sensitization to material** : Not expected to be a skin or respiratory sensitizer.
- Synergistic materials** : None known or reported by the manufacturer.
- other important hazards** : None known or reported by the manufacturer.
- Conditions aggravated by overexposure** : Pre-existing skin, eye and respiratory disorders.

SECTION 12 - ECOLOGICAL INFORMATION

- Ecotoxicity** : No data is available on the product itself. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

See the following tables for individual ingredient ecotoxicity data.

Ecotoxicity data:

<u>Ingredients</u>	CAS No	Toxicity to Fish		
		LC₅₀ / 96h	NOEC / 21 day	M Factor
Butane	106-97-8	N/Ap	N/Ap	N/Ap
Propane	74-98-6	N/Ap	N/Ap	N/Ap

<u>Ingredients</u>	CAS No	Toxicity to Daphnia		
		EC₅₀ / 48h	NOEC / 21 day	M Factor
Butane	106-97-8	N/Ap	N/Ap	N/Ap
Propane	74-98-6	N/Ap	N/Ap	N/Ap

<u>Ingredients</u>	CAS No	Toxicity to Algae		
		EC₅₀ / 96h or 72h	NOEC / 96h or 72h	M Factor
Butane	106-97-8	N/Ap	N/Ap	N/Ap
Propane	74-98-6	N/Ap	N/Ap	N/Ap

- Mobility** : No data is available on the product itself.
- Persistence** : No data is available on the product itself.

Bioaccumulation potential : No data is available on the product itself.

Other Adverse Environmental effects


: No data is available on the product itself.

SECTION 13 - DISPOSAL CONSIDERATIONS

Handling for Disposal : Handle waste according to recommendations in Section 7. Do not puncture or incinerate containers.

Methods of Disposal : Dispose of in accordance with federal, provincial and local hazardous waste laws.

SECTION 14: TRANSPORT INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	UN1950	AEROSOLS	2.2	none	
TDG Additional information	May be shipped as LIMITED QUANTITY when transported in containers no larger than 1.0 Litre, in packages not exceeding 30 kg gross mass. Under the TDGR, refer to Section 1.17 for additional exemption information, if shipping under this exemption.				

SECTION 15 - REGULATORY INFORMATION

Labelling:

Warning! Contents under pressure. Container may explode if heated. May be harmful if inhaled. May cause headache, nausea, dizziness and other symptoms of central nervous system depression. May be mildly irritating to eyes and skin.

Precautions: Use in a well-ventilated area. Wear suitable protective equipment during handling. Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Keep away from heat and flame. Do not puncture, incinerate or expose to heat even when empty. Avoid contact with incompatible materials. Wash thoroughly after handling. Store in a cool, dry, well-ventilated area away from sources of heat, ignition and sunlight.

FIRST AID: If inhaled, move to fresh air. If breathing stopped, begin artificial respiration. Get medical attention. For skin contact, wash with soap and water while removing contaminated clothing. If irritation persists, seek prompt medical attention. For eye contact, flush with running water for at least 15 minutes. If irritation persists, seek prompt medical attention. If ingested, do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.

Refer To Material Safety Data Sheet for further information.

Canadian Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

SECTION 16 - OTHER INFORMATION


Legend :

- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Services
- HSDB: Hazardous Substances Data Bank
- IARC: International Agency for Research on Cancer
- Inh: Inhalation
- LC: Lethal Concentration
- LD: Lethal Dose
- MSHA: Mine Safety and Health Administration
- N/Ap: Not Applicable
- N/Av: Not Available
- NIOSH: National Institute of Occupational Safety and Health
- NOEC: No observable effect concentration

NTP: National Toxicology Program
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RTECS: Registry of Toxic Effects of Chemical Substances
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System
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References

- : 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2013.
2. International Agency for Research on Cancer Monographs, searched 2013.
3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2013 (Chempendium, HSDB and RTECs).
4. Material Safety Data Sheets from manufacturer.
5. OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2013.

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: 08/09/2007

MSDS Revision Date (mm/dd/yyyy)

: 07/24/2013

Revision No.

: 3

Revision Information

- : (M)SDS sections updated:
1. IDENTIFICATION (Chemical Family);
8. EXPOSURE CONTROLS / PERSONAL PROTECTION (Exposure Limit Values);
9. PHYSICAL AND CHEMICAL PROPERTIES;
12. ECOLOGICAL INFORMATION.

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