

MATERIAL SAFETY DATA SHEET**SECTION 1: IDENTIFICATION****Product identifier** : **FABRIC AND UPHOLSTERY CLEANER****Product Use** : Multi-purpose cleaner.**Chemical Family** : Mixture.**Manufacturer part no.** : MPC22C**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);

Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

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. Citrus odour. Floral odour.
WARNING! Aerosol spray. Contents under pressure. Container may explode if heated. May be harmful if inhaled or swallowed. Ingestion of large amounts may be harmful. May cause central nervous system depression. May cause eye, skin and respiratory tract irritation.**POTENTIAL HEALTH EFFECTS:****Signs and symptoms of short-term (acute) exposure****Inhalation** : May cause irritation to the nose, throat and upper respiratory tract. 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 to moderate skin irritation. May be absorbed and cause symptoms similar to those for inhalation. If product is sprayed directly on skin, symptoms of frostbite may be experienced including numbness, prickling and itching.**Eyes** : May cause moderate to severe 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. Ingestion may cause symptoms similar to inhalation.**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

Ingredients	CAS #	Wt. %
Liquefied petroleum gases	68476-86-8	3.00 - 7.00
Diethylene glycol monoethyl ether	111-90-0	1.00 - 5.00
sodium hydroxide	1310-73-2	0.10 - 1.00
Sodium metasilicate	6834-92-0	0.10 - 1.00

SECTION 4 - FIRST AID MEASURES

Inhalation	: Move 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/Take off immediately all 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. Seek immediate medical attention/advice.
Ingestion	: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
Notes For Physician	: Treat symptomatically.

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

- : Not flammable under normal conditions of use. 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; Nitrogen oxides (NOx); Ammonia; hydrogen cyanide ; Nitriles; Nitrosamines; silicon oxides; Sodium oxides; Other unidentified organic compounds.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions	: All persons dealing with the clean-up should wear the appropriate personal 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	: Do not use combustible absorbents, such as sawdust.

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 extreme heat and flame. Avoid contact with incompatible materials. Do not puncture or incinerate. Wash thoroughly after handling. Always replace cap after use.
Storage requirements	: Store in a cool, dry, well-ventilated area away from sources of heat, ignition and sunlight. Inspect periodically for damage or leaks. Keep out of the reach of children.

Incompatible materials : Strong oxidizing agents; Strong acids; Nitrating agents..

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>
Liquefied petroleum gases	N/Av	N/Av	N/Av	N/Av
Diethylene glycol monoethyl ether	25 ppm (AIHA WEEL)	N/Av	N/Av	N/Av
sodium hydroxide	2 mg/m ³ (Ceiling)	N/Av	2 mg/m ³	N/Av
Sodium metasilicate	N/Av	N/Av	N/Av	N/Av

Ventilation and engineering measures

- : 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 : Impervious gloves must be worn when using this product. 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

- : Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink, smoke or use cosmetics while working with this product. Remove and wash contaminated clothing before re-use. Wash with soap and water after handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: Liquid aerosol.	Appearance	: White foamy spray.
Odour	: Citrus odour. Flowery odour.	Odour threshold	: N/Av
pH	: 9.0 - 10.0		
Boiling point	: 100°C	Specific gravity	: 0.99
Melting/Freezing point	: N/Av	Coefficient of water/oil distribution	: N/Av
Vapour pressure (mmHg @ 20° C / 68° F)	: N/Av	Solubility in water	: soluble
Vapour density (Air = 1)	: N/Av	Evaporation rate (n-Butyl acetate = 1)	: Slower than n-butyl acetate
Volatile organic Compounds (VOC's)	: N/Av	Volatiles (% by weight)	: N/Av
Flash point	: N/Av		
Flash point Method	: N/Av	Auto-ignition temperature	: N/Av
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	: Chemical heat of combustion: 2.2 kJ/g		

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** : Open flames, sparks, high heat, direct sunlight, and close proximity to incompatible substances.

Materials To Avoid And Incompatibility

: Strong oxidizing agents; Acids; Nitrating agents..

Hazardous decomposition products

: None known, refer to hazardous combustion products in Section 5.

SECTION 11 - TOXICOLOGICAL INFORMATION**Target organs** : Eyes, skin, respiratory system, digestive system, central nervous system.**Routes of exposure** : *Inhalation:* YES *Skin Absorption:* YES *Skin & Eyes:* YES *Ingestion:* YES**Irritancy** : Mild to moderate skin irritant. Moderate to severe eye irritant.**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>
Liquefied petroleum gases	N/Av	N/Av (gas)	N/Av (gas)
Diethylene glycol monoethyl ether	> 5.24 mg/L (aerosol)	5485 mg/kg	3670 mg/kg
sodium hydroxide	N/Av	N/Av	N/Av
Sodium metasilicate	N/Av	1152 - 1349 mg/kg	> 4640 mg/kg

Carcinogenic status : No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.**Reproductive effects** : Not expected to cause 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, respiratory and central nervous system disorders.

SECTION 12 - ECOLOGICAL INFORMATION**Ecotoxicity** : The ecological characteristics of this product have not been fully investigated. 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
Liquefied petroleum gases	68476-86-8	N/Av	N/Av	N/Av
Diethylene glycol monoethyl ether	111-90-0	13 417 mg/L (Rainbow trout)	N/Av	None.
sodium hydroxide	1310-73-2	N/Av	N/Av	None.
Sodium metasilicate	6834-92-0	210 mg/L (Zebra fish)	N/Av	None.

<u>Ingredients</u>	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Liquefied petroleum gases	68476-86-8	N/Ap	N/Ap	N/Ap
Diethylene glycol monoethyl ether	111-90-0	3996 mg/L (Daphnia magna)	N/Av	None.
sodium hydroxide	1310-73-2	40 mg/L (Water flea)	N/Av	None.
Sodium metasilicate	6834-92-0	N/Av	N/Av	None.

<u>Ingredients</u>	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Liquefied petroleum gases	68476-86-8	N/Ap	N/Ap	N/Ap
Diethylene glycol monoethyl ether	111-90-0	N/Av	N/Av	None.
sodium hydroxide	1310-73-2	N/Av	N/Av	None.
Sodium metasilicate	6834-92-0	N/Av	N/Av	None.

Mobility : No data is available on the product itself.

Persistence : No data is available on the product itself.
The following ingredients are considered to be readily biodegradable: Diethylene glycol monoethyl ether.

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! Aerosol spray. Contents under pressure. Container may explode if heated. May be harmful if inhaled or swallowed. Ingestion of large amounts may be harmful. May cause central nervous system depression. May cause eye, skin and respiratory tract irritation.

PRECAUTIONS: 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 extreme heat and flame. Avoid contact with incompatible materials. Do not puncture or incinerate containers. 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. If breathing is difficult, give oxygen by qualified medical personnel only. Get medical attention. For skin contact, immediately remove contaminated clothing then wash thoroughly with soap and water for at least 15 minutes. If irritation persists, seek prompt medical attention. For eye contact, flush with running water for at least 15 minutes. Seek immediate medical attention/advice. If ingested, do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

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

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.

Prepared for:

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MSDS Preparation Date (mm/dd/yyyy)

: 07/31/2007

MSDS Revision Date (mm/dd/yyyy)

: 08/20/2013

Revision No.

: 3

Revision Information

: (M)SDS sections updated:

2. HAZARDS IDENTIFICATION;
3. COMPOSITION/INFORMATION ON INGREDIENTS;
4. FIRST AID MEASURES ;
5. FIRE-FIGHTING MEASURES (Hazardous combustion products);
8. EXPOSURE CONTROLS / PERSONAL PROTECTION;
9. PHYSICAL AND CHEMICAL PROPERTIES;
11. TOXICOLOGICAL INFORMATION;
12. ECOLOGICAL INFORMATION;
15. REGULATORY INFORMATION.

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