

# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product Name** Marino C - Mist Green Apple  
**CAS #** Mixture  
**Product use** Deodorizer  
**Manufacturer** Freudenberg Household Products Inc.  
59 Talman Court  
Concord, ON L4K 4L5 CA  
Phone: 905-669-9949  
Emergency Phone: 1-613-996-6666 (CANUTEC)

## 2. Hazards Identification

**Emergency overview** DANGER  
Flammable aerosol. Contents under pressure. Containers may explode when heated.  
EYE IRRITANT

**Potential short term health effects**

**Routes of exposure** Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

**Eyes** Causes irritation.

**Skin** May cause irritation. May be absorbed through the skin.

**Inhalation** Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).

**Ingestion** Not a normal route of exposure. May cause stomach distress, nausea or vomiting.

**Target organs** Eyes. Respiratory system. Skin.

**Chronic effects** Prolonged or repeated exposure can cause drying, defatting and dermatitis.

**Signs and symptoms** Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

**OSHA Regulatory Status** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Potential environmental effects** See section 12.

## 3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Isopropanol	67-63-0	30 - 60
Isobutane	75-28-5	15 - 40
Propane	74-98-6	15 - 40

## 4. First Aid Measures

**First aid procedures**

**Eye contact** Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention if irritation develops or persists.

**Skin contact** Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

**Inhalation** If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention. If breathing has stopped, trained personnel should administer CPR immediately.

**Ingestion** Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

**Notes to physician** Symptoms may be delayed.

**General advice**

Do not puncture or incinerate container. Keep away from sources of ignition. No smoking. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Keep out of reach of children.

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## 5. Fire Fighting Measures

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<b>Flammable properties</b>	Flammable by WHMIS/OSHA criteria. Containers may explode when heated.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Dry chemical. Foam. Carbon dioxide. Water spray.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame. Cool containers with flooding quantities of water until well after fire is out.
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of carbon.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

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## 6. Accidental Release Measures

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<b>Personal precautions</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for containment</b>	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Remove sources of ignition. Although the chance of a significant spill or leak is unlikely in aerosol containers, in the event of such an occurrence, absorb spilled material with a non-flammable absorbent such as sand or vermiculite.

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## 7. Handling and Storage

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<b>Handling</b>	Use good industrial hygiene practices in handling this material. Pressurized container: Do not pierce or burn, even after use. Use only with adequate ventilation. Avoid contact with eyes.
<b>Storage</b>	Keep out of reach of children. Keep away from heat, open flames or other sources of ignition. Protect from sunlight. Do not store at temperatures above 49 °C (120.2°F).

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## 8. Exposure Controls / Personal Protection

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### Exposure limits

Ingredient(s)	Exposure Limits
Isobutane	<b>ACGIH-TLV</b> TWA: 1000 ppm <b>OSHA-PEL</b> Not established
Isopropanol	<b>ACGIH-TLV</b> TWA: 200 ppm STEL: 400 ppm <b>OSHA-PEL</b> TWA: 400 ppm
Propane	<b>ACGIH-TLV</b> TWA: 1000 ppm <b>OSHA-PEL</b> TWA: 1000 ppm

### Engineering controls

General ventilation normally adequate.

### Personal protective equipment

#### Eye / face protection

Not normally required when used as directed. Safety glasses if eye contact is possible.

#### Hand protection

Not normally required when used as directed.

#### Skin and body protection

As required by employer code.

#### Respiratory protection

Not normally required if good ventilation is maintained.

#### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

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## 9. Physical and Chemical Properties

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Appearance	Aerosol.
Color	Clear, colorless
Form	Spray
Odor	Apple.
Odor threshold	Not available
Physical state	Gas
pH	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation rate	< 1 (BuAc=1)
Flash point	< 32 °F (< 0.00 °C)
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	> 1 (Air = 1)
Specific gravity	Not available
Octanol/water coefficient	Not available
Solubility (H <sub>2</sub> O)	Soluble
Percent volatile	25 %

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## 10. Stability and Reactivity

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<b>Reactivity</b>	None known.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Heat, open flames, static discharge, sparks and other ignition sources. Aerosol containers are unstable at temperatures above 49°C (120.2°F). Do not mix with other chemicals.
<b>Incompatible materials</b>	Acids. Oxidizers.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon.

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## 11. Toxicological Information

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### Component analysis - LC50

Ingredient(s)	LC50
Isobutane	658 mg/l/4h rat
Isopropanol	16970 mg/l/4h rat
Propane	Not available

### Component analysis - Oral LD50

Ingredient(s)	LD50
Isobutane	Not available
Isopropanol	4396 mg/kg rat
Propane	Not available

### Effects of acute exposure

<b>Eye</b>	Causes irritation.
<b>Skin</b>	May cause irritation. May be absorbed through the skin.
<b>Inhalation</b>	Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness).
<b>Ingestion</b>	Not a normal route of exposure. May cause stomach distress, nausea or vomiting.
<b>Sensitization</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Chronic effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Carcinogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.

#### ACGIH - Threshold Limit Values - Carcinogens

Isopropanol 67-63-0 A4 - Not Classifiable as a Human Carcinogen

#### IARC - Group 3 (Not Classifiable)

Isopropanol 67-63-0 Monograph 71 [1999]; Supplement 7 [1987]; Monograph 15 [1977]

**Mutagenicity** Non-hazardous by WHMIS/OSHA criteria.

**Reproductive effects** Non-hazardous by WHMIS/OSHA criteria.

**Teratogenicity** Non-hazardous by WHMIS/OSHA criteria.

**Name of Toxicologically Synergistic Products** Not available

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## 12. Ecological Information

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**Ecotoxicity** Components of this product have been identified as having potential environmental concerns.

#### Ecotoxicity - Freshwater Algae - Acute Toxicity Data

Isopropanol 67-63-0 96 Hr EC50 *Desmodesmus subspicatus*: >1000 mg/L; 72 Hr EC50 *Desmodesmus subspicatus*: >1000 mg/L

#### Ecotoxicity - Freshwater Fish - Acute Toxicity Data

Isopropanol 67-63-0 96 Hr LC50 *Pimephales promelas*: 9640 mg/L [flow-through]; 96 Hr LC50 *Pimephales promelas*: 11130 mg/L [static]; 96 Hr LC50 *Lepomis macrochirus*: >1400000 µg/L

#### Ecotoxicity - Water Flea - Acute Toxicity Data

Isopropanol 67-63-0 48 Hr EC50 *Daphnia magna*: 13299 mg/L

**Persistence / degradability** Not available

**Bioaccumulation / accumulation** Not available

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<b>Mobility in environmental media</b>	Not available
<b>Environmental effects</b>	Not available
<b>Aquatic toxicity</b>	Not available
<b>Partition coefficient</b>	Not available
<b>Chemical fate information</b>	Not available
<b>Other adverse effects</b>	Not available

### 13. Disposal Considerations

<b>Disposal instructions</b>	Review federal, state/provincial, and local government requirements prior to disposal. Do not puncture or incinerate container.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

### 14. Transport Information

#### U.S. Department of Transportation (DOT)

**Basic shipping requirements:**

<b>Proper shipping name</b>	Aerosols
<b>Hazard class</b>	2.1
<b>UN number</b>	UN1950

**Additional information:**

<b>Special provisions</b>	153, N82
<b>Packaging exceptions</b>	Limited quantity <1L
<b>ERG number</b>	126



#### Transportation of Dangerous Goods (TDG - Canada)

**Basic shipping requirements:**

<b>Proper shipping name</b>	Aerosols, flammable
<b>Hazard class</b>	2.1
<b>UN number</b>	UN1950

**Additional information:**

<b>Special provisions</b>	80
<b>Packaging exceptions</b>	Limited quantity <1L



### 15. Regulatory Information

**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**Canada - WHMIS - Ingredient Disclosure List**

Isopropanol	67-63-0	1 %
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**WHMIS status** Controlled

**WHMIS classification** Class A - Compressed Gas, Class B - Division 5 - Flammable Aerosol, Class D - Division 2B

**WHMIS labeling**



**Occupational Safety and Health Administration (OSHA)**

**29 CFR 1910.1200 hazardous chemical** Yes

**US Federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

Isopropanol	67-63-0	1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)
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**CERCLA (Superfund) reportable quantity**

None

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**  
 Immediate Hazard - Yes  
 Delayed Hazard - No  
 Fire Hazard - Yes  
 Pressure Hazard - Yes  
 Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**Clean Air Act (CAA)** Not available

**Clean Water Act (CWA)** Not available

**State regulations**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**

Isopropanol	67-63-0	Present
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**U.S. - Massachusetts - Right To Know List**

Isobutane	75-28-5	Present
Isopropanol	67-63-0	Present
Propane	74-98-6	Present

**U.S. - Minnesota - Hazardous Substance List**

Isopropanol	67-63-0	Present
Propane	74-98-6	Simple asphyxiant

**U.S. - New Jersey - Right to Know Hazardous Substance List**

Isobutane	75-28-5	sn 1040
Isopropanol	67-63-0	sn 1076
Propane	74-98-6	sn 1594

**U.S. - Pennsylvania - RTK (Right to Know) List**

Isobutane	75-28-5	Present
Isopropanol	67-63-0	Environmental hazard
Propane	74-98-6	Present

**U.S. - Rhode Island - Hazardous Substance List**

Isopropanol	67-63-0	Toxic; Flammable
Propane	74-98-6	Toxic; Flammable

**Inventory name**

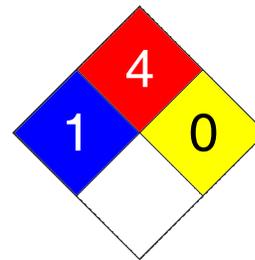
<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

## 16. Other Information

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 1
Flammability	4
Physical Hazard	0
Personal Protection	X



### Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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### Prepared by

Dell Tech Laboratories Ltd. (519) 858-5021

### Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.