

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

Product Name: Marino C - Mist Apple
Product Use: Deodorizer
WHMIS Class: Class A - Compressed Gas, Class B - Division 5 - Flammable Aerosol, Class D - Division 2A, 2B
DOT Classification: Aerosols; Class 2.1; UN1950
TDG Classification: Aerosols, flammable; Class 2.1; UN1950
Manufacturer/Supplier: Marino Manufacturing Ltd.
59 Talman Court
Concord, ON L4K 4L5 CA
Phone: 905-669-9949
Emergency Phone: 1-613-996-6666 (CANUTEC)

LEGEND HMIS/NFPA		Health	*	2
Severe	4	Flammability		4
Serious	3	Physical Hazard		0
Moderate	2	Personal Protection		
Slight	1			
Minimal	0			



SECTION II - HAZARDOUS INGREDIENTS

<u>Ingredient(s)</u>	<u>CAS #</u>	<u>Wt%</u>	<u>OSHA PELS</u>	<u>ACGIH-TLV</u>	<u>LC50</u>	<u>Oral LD50</u>
Ethanol	64-17-5	7 - 13	1000 ppm - TWA	1000 ppm - TWA	31623 ppm rat	3450 mg/kg mouse; 1501 mg/kg rat
Propane	74-98-6	5 - 10	1000 ppm - TWA	1000 ppm - TWA	658 mg/l/4h rat	Not available
Isobutane	75-28-5	30 - 60	Not established	1000 ppm - TWA	658 mg/l/4h rat	Not available
Diethylene glycol monoethyl ether	111-90-0	10 - 30	Not established	25 ppm - TWA	5240.0001 mg/l/4h rat	5500 mg/kg rat

SECTION III - PHYSICAL DATA

Boiling Point:	78.5 °C (173.30 °F)	Specific Gravity:	0.91 - 0.95
Freezing Point:	Not available	Coefficient of Water/Oil Distribution:	Not available
Vapor Pressure:	448 kPa @21.1°C	% Volatile:	95 - 96 %
Vapor Density:	> 1 (Air = 1)	Evaporation Rate:	> 1 (Ether = 1)
Solubility in Water:	Negligible	pH:	Not available
Physical State:	Gas	Viscosity:	Water thin
Appearance:	Clear, colorless Spray	Odor Threshold:	Not available
Odor:	Apple.		

SECTION IV - FIRE AND EXPLOSION DATA

Flammability:	Flammable aerosol by flame projection test. Containers may explode when heated.		
Flash Point:	13 - 121 °C (55.40 - 249.80 °F)	LEL: 1.2 %	UEL: 23.5 %
Hazardous Combustion Products:	May include and are not limited to: Oxides of carbon.		
Autoignition Temperature:	422 °C (791.60 °F)		
Explosion Data:			
Sensitivity to Mechanical Impact:	Not available		
Sensitivity to Static Discharge:	Not available		
Means of Extinction:	Carbon dioxide. Dry chemical. Foam. Water spray.		
Special Fire Hazards:	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. Firefighters should wear a self-contained breathing apparatus.		

SECTION V - REACTIVITY DATA

Conditions for Chemical Instability:	Stable under recommended storage conditions.
Incompatible Materials:	Caustics. Acids. Oxidizers.
Reactivity, and Under What Conditions:	Aerosol containers are unstable at temperatures above 49°C (120.2°F). Do not mix with other chemicals.
Hazardous Decomposition Products:	May include and are not limited to: Oxides of carbon.

SECTION VI - TOXICOLOGICAL PROPERTIES

Route of Entry: Eye, Skin contact, Skin absorption, Inhalation, Ingestion.

EFFECTS OF ACUTE EXPOSURE:

Eye: 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.

EFFECTS OF CHRONIC EXPOSURE:

Skin: Prolonged or repeated exposure can cause drying, defatting and dermatitis.
Irritancy: May cause irritation.
Respiratory Tract Sensitization: Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity: Non-hazardous by WHMIS/OSHA criteria.
Teratogenicity: Non-hazardous by WHMIS/OSHA criteria.
Mutagenicity: Mutagenic effects were observed in somatic and reproductive cells of live animals (rats and mice) exposed to high oral doses of ethanol.
Reproductive Effects: Non-hazardous by WHMIS/OSHA criteria.
Synergistic Materials: Not available

SECTION VII - PREVENTATIVE MEASURES

Gloves: Not normally required when used as directed.
Eye Protection: Not normally required when used as directed.
Respiratory Protection: Not normally required if good ventilation is maintained.
Other Protective Equipment: As required by employer code.
Engineering Controls: General ventilation normally adequate.
Leak and Spill Procedure: 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.
Waste Disposal: Review federal, provincial, and local government requirements prior to disposal. Do not puncture or incinerate container.
Handling Requirements: Use good industrial hygiene practices in handling this material.
Storage Requirements: Keep out of reach of children. Do not store at temperatures above 49 °C (120.2°F). Keep away from heat, open flames or other sources of ignition. Store in a closed container away from incompatible materials.

SECTION VIII - FIRST AID

Eye: 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: 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.
Ingestion: Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.

SECTION IX - PREPARATION INFORMATION

Effective Date: 15-Aug-2008

Expiry Date: 15-Aug-2011

Issue Date: 18-Aug-2008

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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.

Marino C - Mist Apple



Compressed gas. Flammable aerosol. Contains toxic material. Eye irritant.

Do not puncture or incinerate container. Do not store at temperatures above 49°C. Keep away from sources of ignition. No smoking. Avoid contact with eyes and skin. Keep out of reach of children.

EYE: 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: 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.

INGESTION: Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.

READ MATERIAL SAFETY DATA SHEET BEFORE USING PRODUCT

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Gaz comprimés. Aérosol inflammable. Contient matière toxique. Irritant pour les yeux.

Ne pas percer ni incinérer le contenant. Ne pas entreposer à températures dépassant 49°C. Conserver à l'écart de toutes sources d'ignition. Ne pas fumer. Éviter le contact avec les yeux et la peau. Tenir hors de la portée des enfants.

YEUX: Rincer immédiatement à grande eau froide. Enlever les verres de contact, le cas échéant, et continuer à rincer pendant 15 minutes. Obtenir une assistance médicale si les irritations se développent ou persistent.

PEAU: Rincer à grande eau froide. Laver à l'eau et au savon. Obtenir de l'attention médicale si l'irritation persiste.

INHALATION: En cas de symptômes, placer la victime à l'air frais. Si les symptômes persistent, obtenir de l'attention médicale.

INGESTION: Ne pas faire vomir. Rincer la bouche à grande eau, puis boire un ou deux verres d'eau. Appeler un médecin. Ne jamais rien faire boire ou avaler à une victime inconsciente, ou si la victime a des convulsions.

LIRE LA FICHE SIGNALÉTIQUE AVANT D'UTILISER CE PRODUIT