MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number	164
Product name	**Bright Citrus Air Freshener & Deordorizer**
Effective date	11-Apr-2008
Company information	Claire Manufacturing 500 Vista Ave. Addison, IL 60101 United States
Company phone	General Assistance 630-543-7600
Emergency telephone US	800-424-9300
Emergency telephone outside US	703-527-3887
Version #	03
Supersedes date	10-Apr-2008

2. Hazards Identification

Emergency overview	CONTENTS UNDER PRESSURE. Aerosol. Pressurized container may explode when exposed to heat or flame. Prolonged exposure may cause chronic effects.
OSHA regulatory status	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Routes of exposure	Skin contact. Ingestion.
Eyes	Health injuries are not known or expected under normal use.
Skin	Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).
Inhalation	Intentional misuse by concentrating and inhaling the product can be harmful or fatal.
Ingestion	Exposure by ingestion of an aerosol is unlikely. Components of the product may be absorbed into the body by ingestion.
Target organs	Central nervous system. Liver.
Chronic effects	Liver injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage.
Signs and symptoms	Narcosis. Liver enlargement. Jaundice. Defatting of the skin. Irritation.
Potential environmental effects	May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Dimethyl Ether	115-10-6	8 - 10
Isobutane	75-28-5	5 - 8
Ethyl Alcohol	64-17-5	3 - 5
Propane	74-98-6	3 - 5
Non-hazardous and other components below reportable levels		60 - 80

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops or persists.
Skin contact	Immediately take off all contaminated clothing. Wash off with warm water and soap. Get medical attention if irritation develops or persists.
Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, get medical attention.

Ingestion Have victim rinse mouth thoroughly with water. If ingestion of a large amount does occur, call a poison control center immediately.

Notes to physician Symptoms may be delayed.

General advice If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties Containers may explode when heated. Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters

Protective equipment and precautions for firefighters In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

6. Accidental Release Measures

Personal precautions Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Keep unnecessary personnel away.

Environmental precautions Do not contaminate water.

Methods for containment Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

7. Handling and Storage

Handling Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Use only in area provided with appropriate exhaust ventilation. Do not reuse the empty container. Do not use if spray button is missing or defective. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid release to the environment. Avoid prolonged exposure.

Storage Level 1 Aerosol.

Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Do not handle or store near an open flame, heat or other sources of ignition. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Avoid exposure to long periods of sunlight. Keep out of the reach of children. Use care in handling/storage. Level 1 Aerosol (NFPA 30B) Do not store, incinerate, or heat this material above 120 degrees Fahrenheit.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
Isobutane	75-28-5	1000 ppm	Not established	Not established
Ethyl Alcohol	64-17-5	1000 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established

OSHA Components	CAS #	TWA	STEL	Ceiling
Ethyl Alcohol	64-17-5	1000 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established

Engineering controls Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Personal protective equipment

Eye / face protection Wear chemical goggles.

Skin protection Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

General hygeine considerations When using do not smoke. Do not get this material in contact with eyes. Do not get this material in contact with skin. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance Compressed liquefied gas.
Boiling point 163.4 °F (72.8 °C) estimated
Color White.
Flammability (HOC) 8.3602 kJ/g estimated
Flash back No
Flash point -156 °F (-104.4 °C)
Form Aerosol.
Odor Characteristic.
pH 10.06 - 11.06
Physical state Liquid.
Pressure 67 - 77 psig @70F
Solubility Partially
Specific gravity 0.88

10. Chemical Stability & Reactivity Information

Chemical stability May form explosive peroxides.
Conditions to avoid Heat, flames and sparks.
Hazardous decomposition products May include oxides of sulphur.

11. Toxicological Information

Sensitization Not expected to be hazardous by OSHA criteria.
Local effects Liver toxicity. Components of the product may be absorbed into the body through the skin.
Chronic effects Hazardous by OSHA criteria. Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood. Prolonged exposure may cause chronic effects.
Mutagenicity Not expected to be hazardous by OSHA criteria.
Reproductive effects Not expected to be hazardous by OSHA criteria.
Teratogenicity Not expected to be hazardous by OSHA criteria.
Further information Symptoms may be delayed.

12. Ecological Information

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

LC50 2573 mg/L, Fish, 96.00 Hours,
EC50 49115 mg/L, Daphnia, 48.00 Hours,
IC50 7500 mg/L, Algae, 72.00 Hours,

Environmental effects An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. Disposal Considerations

Waste codes	D001: Waste Flammable material with a flash point <140 F
Disposal instructions	Contents under pressure. Do not puncture, incinerate or crush. Dispose of this material and its container at hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.
Contaminated packaging	Do not re-use empty containers.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:	
Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None
Additional information:	
Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None

IMDG

Basic shipping requirements:	
Proper shipping name	AEROSOLS, flammable
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Item	5F
Labels required	None
Transport Category	2

IATA

Basic shipping requirements:	
Proper shipping name	Aerosols, flammable
Hazard class	2.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Labels required	None

15. Regulatory Information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical	Yes

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No
Section 302 extremely hazardous substance	No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	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)

State regulations

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

Dimethyl Ether	115-10-6	Present
Ethyl Alcohol	64-17-5	Present
Isobutane	75-28-5	Present
Propane	74-98-6	Present

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings Health: 0
Flammability: 2
Physical hazard: 0

Prepared by Regulatory Compliance

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Issue date 11-Apr-2008

MSDS sections updated This document has undergone significant changes and should be reviewed in its entirety.