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Material Safety Data Sheet and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name ZEP FREEZE
Product use Gum and Candle Wax Remover
Product code 0240
Date of issue 09/16/04 **Supersedes** 03/13/02

Emergency Telephone Numbers **For MSDS Information:**
Compliance Services 1-877-I-BUY-ZEP (428-9937)

For Medical Emergency
INFOTRAC: (877) 541-2016 Toll Free - All Calls Recorded

For Transportation Emergency
CHEMTREC: (800) 424-9300 - All Calls Recorded
In the District of Columbia (202) 483-7616

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Prepared By
Compliance Services
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Section 2. Composition, Information on Ingredients

Name of hazardous ingredients	CAS #	% by Weight	Exposure Limits
1,1,1,2 - TETRAFLUOROETHANE; HFC-134a	811-97-2	>90	Not established

Section 3. Hazards Identification

Acute Effects

Routes of Entry Dermal contact. Inhalation.

- Skin** Hazardous by the following route of exposure: of skin contact (irritant). Direct contact may cause irritation and redness. Dermal contact with a rapidly evaporating liquid could result in freezing of the tissues or frostbite.
- Eyes** Hazardous by the following route of exposure: of eye contact (irritant). Inflammation of the eye is characterized by redness, watering and itching. Contact with rapidly expanding gas may cause burns or frostbite.
- Inhalation** Hazardous by the following route of exposure: of inhalation. Avoid breathing vapors of this product. Over-exposure by inhalation may cause respiratory irritation. Can cause central nervous system (CNS) depression.

Ingestion Unlikely in this form.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse health effects are lessened by following all prescribed safety precautions, including use of proper personal protective equipment.

Carcinogenic Effects Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Chronic Effects The substance may be toxic to heart. Repeated or prolonged exposure to the substance can produce target organs damage. Inhalation of spray mists or vapors may cause central nervous system depression characterized by headache, dizziness, nausea, stupor, weakness and/or numbness and tingling in the extremities (medical term - peripheral neuropathy).

See Toxicological Information (section 11)

HMIS

Health	1
Fire Hazard	0
Reactivity	0
Personal Protection	B

Section 4. First Aid Measures

- Eye Contact** Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- Skin Contact** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops.
- Inhalation** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
- Ingestion** Since the product is a gas, it will probably be inhaled rather than ingested. Consider first the preventive measures in case of inhalation.

Section 5. Fire Fighting Measures

Flash Point	Not applicable.	Flammable Limits	Not applicable.
Flammability	Non-flammable gas.		
Fire hazard	CONTENTS UNDER PRESSURE. Cool containers with water jet in order to prevent pressure build-up, auto-ignition or explosion.		
Fire-fighting procedures	Use an extinguishing agent suitable for the surrounding fire. Fire-fighters should wear appropriate protective equipment.		

**Section 6. Accidental Release Measures**

Spill Clean up	Unlikely in this form. The vapor/gas is heavier than air and will spread along the ground. Ensure ventilation is adequate if there is a risk of aerosol formation or vapor build-up.
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Section 7. Handling and Storage

Handling	Keep away from heat, sparks and flame. Avoid breathing gas. Avoid contact with eyes, skin and clothing. Keep container closed. Do not enter storage areas and confined spaces unless adequately ventilated. Use only with adequate ventilation. Do not puncture or incinerate. Apply this product only as specified on the label.
Storage	CONTENTS UNDER PRESSURE. Do not puncture or incinerate container. Keep away from heat, sparks and flame. Keep away from heat and direct sunlight. Keep container in a cool, well-ventilated area. Store between the following temperatures: 40°F - 120°F (4.4°C - 49°C). Keep out of the reach of children.

Section 8. Exposure Controls, Personal Protection**Personal Protection****Protective Clothing (Pictograms)**

Eyes	Safety glasses.
Body	Wear appropriate protective clothing to prevent skin contact. Recommended: Nitrile gloves. Neoprene gloves. Rubber gloves.
Respiratory	Avoid breathing gas. Wear appropriate respirator when ventilation is inadequate.

**Section 9. Physical and Chemical Properties**

Physical State	Gas. (Aerosol.)	Color	Clear. Colorless.
pH	Not applicable	Odor	Ethereal. (Slight.)
Boiling Point	<-18°C (-0.4°F)	Vapor Pressure	760 mmHg
Specific Gravity	1.21 (Water = 1)	Vapor Density	<1 (Air = 1)
Solubility	Not applicable	Evaporation Rate	>1 compared with Ether (anhydrous).
		VOC (Consumer)	0 (g/l).

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Reactive with oxidizing agents, metals, alkalis.
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	carbon oxides (CO, CO ₂), hydrogen fluoride, hydrogen chloride, Chlorine.

Section 11. Toxicological Information

Toxicity to Animals	Not available.
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Section 12. Ecological Information

Ecotoxicity	Not available.
Biodegradable/OECD	Not available.

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations.	Waste Stream	Non-regulated waste
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Consult your local or regional authorities.

Section 14. Transport Information

Proper shipping name	1,1,1,2-tetrafluoroethane
DOT Classification	2.2
	UN number 3159

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

TDG Classification	2.2
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Section 15. Regulatory Information

U.S. Federal Regulations	SARA 313 toxic chemical notification and release reporting: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found. All Components of this product are listed or exempt from listing on TSCA inventory.
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State Regulations	California Prop. 65: No products were found.
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WHMIS (Canada)	Class A: Compressed gas.
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Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.