

MSDS***Material Safety Data Sheet***

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189 Twin County Road • Morgantown, Pa 19543 • (610) 524-5810

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SECTION I - PRODUCT IDENTIFICATION

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Product Name: Rapid-Freeze

Azer Scientific Order Number: RAP-FRZ

Product Use: Tissue Freezing Spray

WHMIS Class: Class A - Compressed Gas

TDG Classification: 1,1,1,2-Tetrafluoroethane; Aerosols, Non flammable, Class 2.2, UN1950

HEALTH 1
FLAMMABILITY 0
REACTIVITY 1
PERSONAL PROTECTION B

Manufactured For:

Azer Scientific Inc

189 Twin County Road

Morgantown, Pa 19543

Emergency Phone: 1-610-524-5810

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SECTION II – HAZARDOUS INGREDIENTS

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Ingredients	CAS#	Wt%	ACGIH-TLV	LC 50	LD 50
1,1,1,2-Tetrafluoroethane	811-97-2	60 - 100	1000 ppm TWA *	Not available	Not available

- This AEL value is DuPont's Acceptable Exposure Limit, (not an ACGIH-TLV). Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

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SECTION III - PHYSICAL DATA

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Boiling Point of Concentrate (°C): -26.5 **Specific Gravity of Concentrate (H₂O = 1):** 1.21 @ 25°C

Pressure (can, kPa @ 21.1 °C): ~584 % **Volatile (Wt %):** 100

Vapour Density (Air = 1): 3.6 **Evaporation Rate (Ether = 1):** Not available

Solubility in Water: Negligible **pH (100%):** Not available

Physical State: Gas **Viscosity:** Not applicable

Appearance; Odour: Clear, colourless; slight ethereal **Odour Threshold (ppm):** Not available

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SECTION IV - FIRE AND EXPLOSION DATA

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Flammability: Not flammable by WHMIS criteria.

Flash Point of Concentrate (°C, TCC): None **LEL:** Not available **UEL:** Not available

Hazardous Combustion Products: May include and are not limited to oxides of carbon, fluoride gases.

Auto-ignition Temperature (°C): > 750

Means of Extinction: Dry chemical, water spray, foam, alcohol foam, carbon dioxide.

Special Fire Hazards: Contents under pressure. Container may explode with heat. Cool containers with water spray and remove source of ignition if safe. Fire fighters should wear self-contained breathing apparatus.

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SECTION V - REACTIVITY DATA

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Conditions for Chemical Instability: Stable.

Incompatible Materials: Acids, oxidizers.

Reactivity, and Under What Conditions: Content s under pressure, do not store at temperatures above 49°C.

Hazardous Decomposition Products: May include and are not limited to oxides of carbon, fluoride gases when heated to decomposition.

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SECTION VI - TOXICOLOGICAL PROPERTIES

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Route of Entry: Eye, Skin contact, Inhalation.

EFFECTS OF ACUTE EXPOSURE:

Eye: May cause irritation. Contact with liquid may cause frostbite.

Skin: May cause irritation. Contact with liquid may cause frostbite.

Inhalation (of vapors): Excessive intentional inhalation may cause respiratory tract irritation and central nervous system effects (headache, dizziness). Very high levels can cause unconsciousness, respiratory arrest and death due to oxygen displacement.

EFFECTS OF CHRONIC EXPOSURE:

Skin: Prolonged or repeated exposure can cause drying, defatting and dermatitis.

Irritancy: Non-hazardous by WHMIS criteria.

Respiratory Tract Sensitization: No data available.

Carcinogenicity: Non-hazardous by WHMIS criteria.

Teratogenicity, Mutagenicity, Reproductive Effects: No data available.

Synergistic Materials: Not available.

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SECTION VII- PREVENTATIVE MEASURES

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Gloves: Impervious. Confirm with a reputable supplier first.

Eye Protection: Chemical splash goggles.

Respiratory Protection: Not normally required if good ventilation is maintained. If ventilation is not adequate, use an approved air-purifying respirator.

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, state/provincial, and local government requirements prior to disposal. Do not puncture or incinerate container.

Storage and Handling Requirements: KEEP OUT OF REACH OF CHILDREN. Store in a closed container away from incompatible materials. Avoid heat, open flame, and other sources of ignition in the use and storage of this product. Do not store at temperatures above 49°C.

SECTION VIII - FIRST AID

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Eye: Flush immediately with water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.

Skin: Wash with soap and warm 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: Not a normal route of exposure. However, if accidental ingestion occurs, 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.

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