



MATERIAL SAFETY DATA SHEET

I - Product Identification

Product Identifier:

- { Fire Extinguisher Halon 1211 (BCF)
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Chemical Name: Bromochlorodifluoromethane
Chemical Family: Halogenated Hydrocarbons Formula: CF_2ClBr

Product Use:

Used in the application of extinguishing fires.

Manufacturer's Name and Telephone Number:

Flag Fire Equipment Limited
County Rd. 22 & Patillo Road,
Tecumseh, Ontario
N8N 2L9

Emergency Telephone: **519-727-6722**
Technical Information: 519-727-6722

II - Hazardous Ingredients

Name	%	Cas #	OSHA PEL	ACGIH TLV
Bromochlorodifluoro me-thane	>99	353-59-3	N/Av	N/Av

Other Ingredients

None

Fire Extinguishers contain compressed gas to ensure a high velocity discharge of product. WHMIS Class A.

III - Physical Data

Physical State	Gas
Odour and Appearance	Sweet Odour/Colourless Gas
Odour Threshold (ppm)	100%
Vapour Pressure (mm Hg)	1773 at 20°C
Evaporation Rate	High
Boiling Point (°C)	-3.88°C
Freezing Point (°C)	-160.5°C
pH	5.7
Specific Gravity	1.83
Solubility in Water	Insoluble

IV - Fire and Explosion Data

Flashpoint (°C) and Method:	Non-flammable
Means of Extinction	None required
Upper Flammable Point	Not Applicable
Lower Flammable Point	Not Applicable
Auto Ignition Temperature (°C)	Not Applicable
Hazardous Combustion Products	None Known

Explosion Data

Sensitivity to Impact	Not Applicable
Sensitivity to Static Discharge	Not Applicable

V - Reactivity Data

- † Yes Chemical Stability
- † Yes Incompatibility with other substances

Conditions to avoid:

Prolonged breathing of product above 4% concentration.

Hazardous Decomposition Products

Decomposes above 482°C trace amounts of hydrogen halides & halogens. Carbonyl halides not detected by instruments sensitive to 0.25 PPM. Hazardous polymerization will not occur.

VI - Toxicological Properties

Route of Entry

- † Skin Contact
- † Eye Contact
- † Inhalation
- z Skin Absorption
- † Ingestion

Effects of Overexposure:

If exposed to greater than 4% for excess of 1 minute: dizziness, impaired co-ordination & reduced mental acuity will occur. The acute inhalation LC50 for rats with four hours exposure is 211.2 mg./l.

Teratogenicity	None
Reproductive Toxicity	None
Mutagenicity	None
Synergistic Products	Not Available

VII - Preventative Measures

Gloves	None Required
Respirator	If working in high concentration for extended periods, wear an NIOSH-approved self-contained breathing apparatus.
Footwear	None Required
Clothing	None Specified
Eyewear	None Required

Engineering Controls

Adequate ventilation or a fresh air supply at recharge station.

Leak and Spill Procedure

Ventilate area before entering.

Waste Disposal

No residual waste.

Handling Procedures	Avoid container damage
Storage Requirements	Cool dry areas
Special shipping information	

Fire Extinguisher Class 2.2 UN # 1044
Halon 1211 Tanks Class 2.2 UN 1974 Packing Group X

VIII - First Aid Measures

Inhalation:	Remove victim to fresh air. If not breathing, give artificial respiration. Obtain medical attention immediately. Do not administer adrenalin/ephedrine.
Ingestion:	Not applicable.
Eye Contact:	Flush eyes with running water for at least 20 minutes, holding eyelids open. Obtain medical attention immediately.
Skin Contact:	Wash thoroughly with soap and water. If irritation persists, obtain medical attention immediately.

IX - Preparation Date of MSDS

Prepared by Department: Health and Safety
Date: June 30, 2000

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MSDS Control # 504-00MS

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