FLAG FIRE — MATERIAL SAFETY DATA SHEET

I - Product Identification

Product Identifier:

- Fire Extinguisher BC Standard Dry Chemical
- Fire Extinguisher Powder BC Standard

Chemical Name: PDC Dry Chemical (Sodium Bicarbonate)
Chemical Family: Mixture Formula: $NaHCO_3$

Product Use:

Used in the application of extinguishing fires.

Manufacturer's Name and Telephone Number:

Flag Fire Equipment Limited
Hwy #2 & Patillo Road, RR#1
Tecumseh, Ontario
N8N 2L9

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

II - Hazardous Ingredients

Name	%	Cas #	LD_{50}	LC_{50}
Crystalline Silica	0.37	14808-60-7	Not Available	Not Available

Other Ingredients

Name	Cas #
Sodium Biacarbonate	144-55-8
Mica	12001-26-2

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

III - Physical Data

Physical State	Solid
Odour and Appearance	White Crystal and odourless
Odour Threshold (ppm)	Not Applicable
Vapour Pressure (mm Hg)	Not Applicable
Evaporation Rate	None
Boiling Point (°C)	Not Applicable
Freezing Point (°C)	Not Applicable
pH	Not Determined
Specific Gravity	Not Applicable
Solubility in Water	16 grams / 100 ml H_2O

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:

Do not mix with strong Acids

Hazardous Decomposition Products

Gaseous Carbon Dioxide produced when raised to 190°F. Will result in irritation to the eyes, skin and respiratory tract.

VI - Toxicological Properties

Route of Entry

☑ Skin Contact ☑ Eye Contact ☑ Inhalation
☐ Skin Absorption ☑ Ingestion

Effects of Overexposure:

At high dust concentrations, irritation of eyes, skin and mucus membranes by chemical or mechanical action may occur. Doses over 5 g/kg body weight can cause alkalosis and expansion in extracellular fluid volume with edema.

Exposure Limits	Not Available
Irritancy of Product	Not Available
Sensitization to Product	Not Available
Carcinogenicity	While not considered a carcinogen, the product does contain minute traces of Crystalline Silica. Crystalline Silica has been determined by IARC to contain limited evidence of being carcingenic in humans and sufficient evidence in animals. It is not listed as a carcinogen by OSHA or ACGIH.
Teratogenicity	None
Reproductive Toxicity	None
Mutagenicity	None
Synergistic Products	Not Available

VII - Preventative Measures

Gloves	Chemical resistant gloves
Respirator	If in high dust concentration, wear a properly fitted NIOSH-approved self-contained breathing respirator
Footwear	Chemical resistant footwear
Clothing	Work clothing
Eyewear	Safety glasses with side shields

Engineering Controls

Adequate ventilation should be available to maintain dust levels below applicable standards on respirable and total nuisance dust. (at recharge stations only)

Leak and Spill Procedure

Ensure clean-up is performed by trained personnel only. Shovel or sweep up dry material for recycling or disposal. Flush residue with water.

Waste Disposal

Review federal, provincial/state, and local government requirements prior to disposal.

Handling Procedures	Avoid container damage
Storage Requirements	Cool dry areas, away from acids
Special shipping information	Fire Extinguisher Class 2.2 UN # 1044

VIII - First Aid Measures

Inhalation:	If breathing difficulty occurs because of dust inhalation, remove to fresh air.
Ingestion:	If person is conscious, give large amounts of water. If appreciable quantities induce vomiting. Get medical attention
Eye Contact:	If eye irritation occurs, flush with copious amounts of water. Get medical attention if irritation persists.
Skin Contact:	Wash with mild soap and water.

IX - Preparation Date of MSDS

Prepared by Department: Health and Safety
Date: JANUARY 17, 1997

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Fire Extinguisher BC Standard Dry Chemical