



Distributed by: A-1 Fire Protection  
1602 Redfield Street  
La Crosse, WI 54601  
Phone: (608) 785-7570  
Fax: (608) 785-7012  
Web: [www.a1fireprotection.com](http://www.a1fireprotection.com)

## Range Guard Wet Chemical Fire Extinguisher System Pressurized Cylinders - September 1999

### Section 1 - Name & Hazard Summary

**Material name:** Range Guard Wet Chemical Fire Extinguisher System Pressurized Cylinders

**Manufacturer:** Badger Fire Protection Phone (804) 973-4361

### Section 2 - Ingredients

**LD50:** (Rats) 1870 mg/kg

**LC50:** NA

**Other Exposure Limits:** None

**CAS No:** 584-08-7

The cylinders contain an aqueous solution of Potassium Carbonate >40%, which acts as a fire suppression agent. The cylinders are pressurized. Although unlikely to occur, a cylinder could be propelled and cause bodily injury and/or property damage if the valve is broken due to improper handling or storage. Also, if a cylinder is over-pressurized, exposed to direct heat, or receives severe physical impact, it could discharge or rupture causing bodily injury and/or property damage.

### Section 3 - Physical Data

**Boiling point:** 109 deg.C. @ 760 mm Hq **Vapor density:** (Air=1): NA

**Solubility in water:** 100% **Appearance and odor:** Clear liquid no distinct odor

**Specific gravity:** (H2O-1): 1.445 **Evaporation Rate:** NA **Reactivity in Water:** No

**Freezing Point:** -29 deg.C **Vapor Pressure (mm Hq):** 12 @ 20 deg.C **pH:** 13

### Section 4 - Fire and Explosion Hazard Data

**Flash point:** N/A **Auto-Ignition temp.:** NA **Extinguisher Media:** NA

**UFL Upper:** NA **Vel Upper:** NA

**Special Fire Fighting Procedures:** NA, This is a fire suppression agent.

**LFL Lower:** NA **Method Used:** NA

**Flammable Limits in Air % by Volume:** **LEL Lower:** NA

**Unusual Fire and Explosion Hazards:** NA

### Section 5 - Reactivity Data

**Stability:** Stable

**Conditions to Avoid:** None

**Incompatibility (Materials to Avoid):** Reactive metals, C1F3, lime dust (CaO), any material reactive with water.

**Hazardous Decomposition Products:** None established.

**Hazardous polymerization:** Will not occur. **Conditions to Avoid:** NA

### Section 6 - Health Hazard Assessment

**Acute:** May be irritating to body tissue. **Chronic:** None established.

**Signs and Symptoms of Exposure:** Prolonged contact may be irritating to skin, eyes and mucous membrane.

**Medical Conditions Generally Aggravated by Exposure:** Prolonged contact may cause chemical burns.

**Chemical Listed as Carcinogen or Potential Carcinogen: I.A.R.C.:** No **Monographs:** No **AGCH:** No

**Reproductive Toxicity:** Not available, based upon Material Safety Data Sheet from supplier of Potassium Carbonate.

**Teratogenicity:** Not available, based upon Material Safety Data Sheet from supplier of Potassium Carbonate.

**Mutagenicity:** Not available, based upon Material Safety Data Sheet from supplier of Potassium Carbonate.  
**Toxicologically Synthetic Products:** Not available, based upon Material Safety Data Sheet from supplier of Potassium Carbonate.  
**Routes of Entry:** 1. **Inhalation:** Yes 2. **Eyes:** Yes 3. **Skin:** Yes 4. **Ingestion:** Yes

### Section 7 - Spill or Leak Procedures

**Precautions to be Taken in Handling and Storage:** Handle, transport and store carefully and securely to avoid accidental knocking over or other severe physical impacts. Do not expose to direct heat sources. Do not over-pressurize.

**Other Precautions:** Cylinders should be recharged only by trained and qualified personnel.

**Steps to be Taken in Case Material is Released or Spilled:** Contain any spill. Place in closed container for proper disposal. Wash spill areas liberally with water to remove traces.

**Waste Disposal Methods:** Dispose of in accordance with local, provincial and federal regulations.

**Respiratory Protection:** None required **Ventilation:** Good Ventilation

**Local Exhaust:** Yes **Mechanical (General):** Not required **Special:** NA **Other:** NA

**Protective Gloves:** Rubber gloves recommended during spill/leak procedures.

**Eye Protection:** Chemical goggles recommended during spill/leak procedures.

**Other Protective Clothing or Equipment:** Safety shoes are recommended when handling cylinders.

### Section 8 - Special Protection Information

**First Aid Procedures:** If exposed to the fire suppression agent, flush and irrigate eyes with water for 15 minutes while holding eyelids open. For skin contact, wash thoroughly with soap and water. For inhalation, seek fresh air. For ingestion, dilute by drinking large quantities of water. If irritation persists, seek medical attention.

In the event of physical injury, due to exposure to the compressed gas hazard, take appropriate first aid or medical measures.

**Note:** This Material Safety Data Sheet (MSDS) addresses the hazards associated with compressed gas only. For information concerning the fire suppression agent (Carbon Dioxide) refer to the appropriate MSDS. In each instance, in this MSDS, where the letters NA or words not applicable are used, it means Not Applicable, with respect to compressed gas.