



BADGER FIRE PROTECTION, INC.

MATERIAL SAFETY DATA SHEET

Emergency # (800) 424-9300
4251 Seminole Trail
Charlottesville, VA 22911 (804) 973-4361
Date: April, 1996

SECTION 1 NAME & HAZARD SUMMARY

Material name: Range Guard Karboloy Fire Extinguisher Suppression Agent
Manufacturer: Badger Fire Protection, Inc. • Phone (804) 973-4361

SECTION 2 INGREDIENTS

OSHA PEL: Non Established **ACGIH TLV:** None Established **Other Exposure Limits:** None
CAS No: 584-08-7

The recharge packages contain an aqueous solution of Potassium Carbonate >40%, which acts as a fire suppression agent.

SECTION 3 PHYSICAL DATA

Boiling point: 228 deg.C. @ 760 mm Hq **Specific gravity:** (H₂O=1):1.445
Vapor Pressure (mm Hq): 12 @ 20 deg.C **Vapor density:** (Air = 1): NA **Solubility in water:** 100%
Reactivity in Water: None **Appearance and odor:** Clear liquid, no distinct odor
Melting Point: -20 deg. F. (-29 deg. C.)

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

Flash point : NA **Method Used:** NA **Flammable Limits in Air % by Volume:** LEL Lower: NA UEL Upper: NA
Auto-Ignition Temp.: NA **Extinguisher Media:** NA This is a fire extinguishing agent.
Special Fire Fighting Procedures: Avoid direct heat and severe impact to pressurized cylinders.
Unusual Fire and Explosion Hazards: See Sections 2 and 7.

SECTION 5 REACTIVITY DATA

Stability: Stable **Conditions to Avoid:** Direct heat and severe impact to pressurized cylinders.
Incompatibility (Materials to Avoid): Lime dust (CAO) and any material reactive with water.
Hazardous polymerization: Will not occur. **Conditions to Avoid:** NA

SECTION 6 HEALTH HAZARD ASSESSMENT

Acute: May be irritating to body tissue. **Chronic:** The effect of chronic over-exposure may consist of multiple areas of superficial irritation. Prolonged contact may result in primary irritant dermatitis and possible destruction of tissue. Similarly, chronic over-exposure to the inhalation of dust, spray or mist may result in varying degrees of irritation to the respiratory tract tissue and an increased susceptibility to respiratory illness.

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: National Toxicology Program : No

Monographs: No **I.A.R.C.:** No **OSHA:** No

Emergency and 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.

Routes Of Entry: 1. **Inhalation:** Yes 2. **Eyes:** Yes 3. **Skin:** Yes 4. **Ingestion:** Yes



Range Guard Karbaloy Fire Suppression Agent *continued*

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, state and federal regulations.

SECTION 8 SPECIAL PROTECTION INFORMATION

Respiratory Protection: For acute exposure, no respiratory protection is necessary. For chronic exposure to spray or mist use of a NIOSH/MSHA approved respirator is recommended.

Ventilation: Good Ventilation **Local Exhaust:** Yes **Mechanical (General):** Not Required **Special:** None

Other: None

Gloves: Rubber gloves recommended during spill/ leak procedures and during recharging operations.

Eye Protection: Chemical goggles recommended during spill/leak procedures and during recharging operations.

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

Work/Hygienic Practices: None established.