



A UTC Fire & Security Company

# MATERIAL SAFETY DATA SHEET

## Purple K Dry Chemical (Fire Extinguishing Agent)

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATIONS AND OF THE COMPANY UNDERTAKING

**Product Name** Purple K Dry Chemical (Fire Extinguishing Agent)  
**Other Trade Names** Potassium Bicarbonate, PK,PKP  
**Product Description** Fire Extinguishing Agent  
**Manufacturer/Supplier** Badger Fire Protection  
**Address** 944 Glenwood Station Lane, Suite 303  
Charlottesville, VA 22901  
USA  
**Phone Number** (434)-964-3200  
**Chemtrec Number** (800) 424-9300  
**(for emergencies only)** (703) 527-3887 (International)  
**Revision Date:** February 9, 2012  
**MSDS Date:** January 15, 2007

*Safety Data Sheet according to EC directive 2001/59/EC and OSHA's Hazcom Standard (29 CFR 1910.1200)*

### 2. HAZARDS IDENTIFICATION

#### EU Main Hazards

Non Hazardous Powder

#### Routes of Entry

Eye contact - Inhalation - Skin contact

#### Carcinogenic Status

See Section 11 - Toxicity

#### Target Organs

Respiratory System - Skin - Eye

#### Health Effects - Eyes

Contact for short periods of time may cause irritation.

#### Health Effects - Skin

Contact may cause mild irritation.

#### Health Effects - Ingestion

Ingestion is not an expected route of exposure.

#### Health Effects - Inhalation

May irritate the respiratory tract. May cause transient cough and shortness of breath.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS#/Codes	Concentration	R Phrases	EU Classification
Potassium Bicarbonate	298-14-6 EC#2060590	75 - 90%	None	None
Calcium Carbonate	471-34-1 EC#2074399	5 - 15%	None	None
Mica	12001-26-2	2 - 6%	None	None
Clay	8031-18-3	1 - 5%	None	None



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#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Component Name	CAS#/Codes	Concentration	R Phrases	EU Classification
Amorphous Silica	7631-86-9 EC#2315454	<2%	None	None
Dye	NA	<1%	None	None

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#### 4. FIRST AID MEASURES

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##### Eyes

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

##### Skin

Wash affected area with soap and water. Obtain medical attention if irritation persists.

##### Ingestion

Dilute by drinking large quantities of water and obtain medical attention.

##### Inhalation

Move victim to fresh air. Obtain medical attention immediately for any breathing difficulty.

##### Advice to Physicians

Treat symptomatically.

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#### 5. FIRE - FIGHTING MEASURES

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##### Extinguishing Media

This preparation is used as an extinguishing agent and therefore is not a problem when trying to control a blaze. Use extinguishing agent appropriate to other materials involved. Keep pressurized extinguishers and surroundings cool with water spray as they may rupture or burst in the heat of a fire.

##### Unusual Fire and Explosion Hazards

Pressurized containers may explode in heat of fire.

##### Protective Equipment for Fire-Fighting

Wear full protective clothing and self-contained breathing apparatus as appropriate for specific fire conditions.

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#### 6. ACCIDENTAL RELEASE MEASURES

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Sweep up or vacuum. Prevent skin and eye contact. Wear appropriate protective equipment.

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#### 7. HANDLING AND STORAGE

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Pressurized extinguishers should be properly stored and secured to prevent falling or being knocked over. Do not drag, slide or roll extinguishers. Do not drop extinguishers or permit them to strike against each other. Never apply flame or localized heat directly to any part of the extinguisher or plastic container. Store pressurized extinguishers and plastic containers away from high heat sources. Storage area should be: - cool - dry - well ventilated - under cover - out of direct sunlight

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#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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##### Occupational Exposure Standards

Occupational exposure limits are listed below, if they exist.

##### Mica

**ACGIH TLV:** 3 mg/m<sup>3</sup> TWA, measured as respirable fraction of the aerosol.

**OSHA PEL:** 20 mppcf, <1% crystalline silica

##### Calcium Carbonate

**OSHA PEL:** 15 mg/m<sup>3</sup> TWA, total dust

5 mg/m<sup>3</sup> TWA, respirable fraction

##### Nuisance Dust Limit

**OSHA PEL:** 50 mppcf or 15 mg/m<sup>3</sup> TWA, total dust

15 mppcf or 5 mg/m<sup>3</sup> TWA, respirable fraction

##### Engineering Control Measures

Use with adequate ventilation. There should be local procedures for the selection, training, inspection and maintenance of this equipment. When used in large volumes, use local exhaust ventilation.

##### Respiratory Protection

Not normally required. Use dust mask where dustiness is prevalent, or TLV is exceeded.

##### Hand Protection

Not normally needed when used as a portable fire extinguisher. Use gloves if irritation occurs.

##### Eye Protection

Chemical goggles or safety glasses with side shields.

##### Body Protection

Normal work wear.

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#### 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>Physical State</b>	Powder
<b>Color</b>	Purple
<b>Odor</b>	Odorless
<b>Specific Gravity</b>	Not available
<b>Boiling Range/Point (°C/F)</b>	Not applicable
<b>Flash Point (PMCC) (°C/F)</b>	Not Flammable
<b>Solubility in Water</b>	Not applicable
<b>Vapor Density (Air = 1)</b>	Heavier than air.
<b>Vapor Pressure</b>	Not applicable
<b>Evaporation Rate</b>	Not applicable

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#### 10. STABILITY AND REACTIVITY

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##### Stability

Stable under normal conditions.

##### Conditions to Avoid

Heat - High temperatures - Exposure to direct sunlight

##### Materials to Avoid

Strong oxidizing agents - strong acids - NaK alloy - NH<sub>4</sub>H<sub>2</sub>PO<sub>4</sub>



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### 10. STABILITY AND REACTIVITY

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**Hazardous Polymerization**

Will not occur.

**Hazardous Decomposition Products**

Oxides of carbon

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### 11. TOXICOLOGICAL INFORMATION

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**Acute Toxicity**

Low order of acute toxicity.

**Chronic Toxicity/Carcinogenicity**

This product is not expected to cause long term adverse health effects.

Calcium carbonate, mica, and clay may contain small quantities of quartz (crystalline silica) as an impurity. Prolonged exposure to respirable crystalline silica dust at concentrations exceeding the occupational exposure limits may increase the risk of developing a disabling lung disease known as silicosis. IARC found limited evidence for pulmonary carcinogenicity of crystalline silica in humans.

**Genotoxicity**

This product is not expected to cause any mutagenic effects.

**Reproductive/Developmental Toxicity**

This product is not expected to cause adverse reproductive effects.

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### 12. ECOLOGICAL INFORMATION

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**Mobility**

No relevant studies identified.

**Persistence/Degradability**

No relevant studies identified.

**Bio-accumulation**

No relevant studies identified.

**Ecotoxicity**

No relevant studies identified.

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### 13. DISPOSAL CONSIDERATIONS

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Dispose of container in accordance with all applicable local and national regulations. Do not cut, puncture or weld on or near to the container. No harm to the environment is expected from this preparation.

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### 14. TRANSPORT INFORMATION

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<b>DOT CFR 172.101 Data</b>	Not regulated
<b>UN Proper Shipping Name</b>	Not regulated
<b>UN Class</b>	None
<b>UN Number</b>	None
<b>UN Packaging Group</b>	None

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#### 14. TRANSPORT INFORMATION

**NOTE:** For additional HAZMAT shipping information related to shipping pressurized fire extinguishers, refer to Badger Technical Bulletin #123-1201 available for download at [www.badgerfire.com](http://www.badgerfire.com).

#### 15. REGULATORY INFORMATION

##### EU Label Information

Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments(2001/60/EC and 2006/8/EC)

##### EU Hazard Symbol and Indication of Danger.

This preparation is not classified as dangerous.

##### R phrases

None

##### S phrases

None.

##### US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS

##### TSCA Listing

This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Substance Inventory.

##### EINECS Listing

All ingredients in this product have not been verified for listing on the European Inventory of Existing Commercial Chemical Substances (EINECS) or the European List of New Chemical Substances (ELINCS).

##### DSL/NDSL (Canadian) Listing

All ingredients in this product are listed on the Domestic Substance List (DSL) or the Non-Domestic Substance List (NDSL) or are exempt from listing.

##### WHMIS Classification

D2B

This product was classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations and the MSDS contains all the information required by these regulations.

##### MA Right To Know Law

All components have been checked for inclusion on the Massachusetts Substance List (MSL). Those components present at or above the de minimus concentration include: - Mica (12001-26-2) 1-4% - Amorphous Silica (7631-86-9) 0.2 -1.0% - Calcium Carbonate (471-34-1) 5-15%

##### PA Right To Know Law

This product contains the following chemicals found on the Pennsylvania Hazardous Substance List: - Mica (12001-26-2)1-4%-Amorphous Silica (7631-86-9)0.2-1.0%-Calcium Carbonate (471-34-1)5-15%

##### NJ Right To Know Law

This product contains the following chemicals found on the NJ Right To Know Hazardous Substance List: - Mica (12001-26-2) 1-4% - Amorphous Silica (7631-86-9) 0.2 -1.0%

##### California Proposition 65

This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.



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### 15. REGULATORY INFORMATION

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**SARA Title III Sect. 302 (EHS)**

This product does not contain any chemicals subject to SARA Title III Section 302.

**SARA Title III Sect. 304**

This product does not contain any chemicals subject to SARA Title III Section 304.

**SARA Title III Sect. 311/312 Categorization**

Immediate (Acute) Health Hazard

**SARA Title III Sect. 313**

This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

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### 16. OTHER INFORMATION

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**NFPA Ratings**

NFPA Code for Health - 1

NFPA Code for Flammability - 0

NFPA Code for Reactivity - 0

NFPA Code for Special Hazards - None

**HMIS Ratings**

HMIS Code for Health - 1

HMIS Code for Flammability - 0

HMIS Code for Reactivity - 0

HMIS Code for Personal Protection - See Section 8

**Abbreviations**

N/A: Denotes no applicable information found or available

CAS#: Chemical Abstracts Service Number

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit

NTP: National Toxicology Program

IARC: International Agency for Research on Cancer

R: Risk

S: Safety

**Prepared By:** EnviroNet LLC.

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