

**BUCKEYE FIRE EQUIPMENT COMPANY'S LIQUID FIRE SUPPRESSION AGENT  
MATERIAL SAFETY DATA SHEET (CONFORMS TO DIRECTIVE 2001/58/EC)**

**1. Identification of the Substance/Preparation and of the Company/Undertaking**

**1.1 Identification of the preparation**

Product Name: "Liquid Fire Suppression Agent"  
Chemical Name: N/A - This is a mixture/preparation.  
CAS No.: N/A - This is a mixture/preparation.  
Chemical Formula: N/A - This is a mixture/preparation.  
EINECS Number: N/A - This is a mixture/preparation.

**1.2 Use of the preparation**

The intended or recommended use of this preparation is as a FIRE EXTINGUISHING AGENT.

**1.3 Company Identification**

Manufacturer/Supplier: Buckeye Fire Equipment Company  
Address: 110 Kings Road, Kings Mountain, NC 28086  
Prepared By: Buckeye Fire Equipment Company  
Phone: (704) 739-7415  
Internet/Home Page: [www.buckeyef.com](http://www.buckeyef.com)  
Date of Issue: January 2008

**1.4 Emergency Telephone**

CHEMTREC 1-800-424-9300

**2. Composition/Information on Ingredients**

2.1 Ingredient Name: Potassium Carbonate (Potash).  
Chemical Formula:  $K_2CO_3$ .  
CAS No.: 584-08-7.  
EINNECS Number: 209-529-3.  
Concentration, Wt%: 43-45%  
Hazard Identification: See Heading 3.

Ingredient Name: Water.  
Chemical Formula:  $H_2O$   
CAS No.: 7732-18-5.  
EINNECS Number: 231-791-2.  
Concentration, Wt%: 58-60%  
Hazard Identification: See Heading 3.

**3. Hazards Identification**

FOR HUMANS:

Product:

E U Classification:  
R 36/37/38

Irritant  
Irritating to eyes, respiratory system, and skin

**3. Hazards Identification (continued)**

S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36	Wear suitable protective clothing.
Components:	
Potassium Carbonate:	
E U Classification:	Harmful.
R 20/21/22	Harmful by inhalation, in contact with skin, and if swallowed.
S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36	Wear suitable protective clothing.
Water:	
EU Classification:	Not classified as dangerous.
Limit Values for Exposure:	None established.

Neither this preparation nor the substances contained in it have been listed as carcinogenic by National Toxicology Program, I.A.R.C., or OSHA.

**SIGNS AND SYMPTOMS:**

Acute Exposure:	
Eye Contact:	Irritant. Prolonged contact can cause chemical burns.
Skin Contact:	Irritant. Prolonged contact can cause chemical burns.
Inhalation:	Can be irritating to mucous membranes.
Ingestion:	Irritating to mucous membranes.
Chronic Overexposure:	No data available.

Medical Conditions Generally Aggravated by Exposure:      None Known.

**FOR ENVIRONMENT:**

No data available.

**4. First Aid Measures**

Eye Contact:	Wash with water for a minimum of 15 minutes. If irritation persists seek medical attention.
Skin Contact:	Wash affected area with soap and water. If irritation persists seek medical attention.
Inhalation:	Remove from exposure. If irritation persists seek medical attention.
Ingestion:	Dilute by drinking large quantities of water.

**5. Fire-Fighting Measures**

This preparation is an extinguishing media.  
 There are NO extinguishing media which must not be used for safety reasons.  
 NO special protective equipment is needed for fire-fighters. Wear protective equipment appropriate for the fire conditions.

**6. Accidental Release Measures**

Turn off or disconnect electrical sources in the immediate area.  
 For personal protection: Prevent skin and eye contact, see Heading 8.  
 Clean up: Use an absorbent material such as diatomaceous earth, sawdust, etc., and sweep up, see Heading 13.  
 NO harm to the environment is expected from an accidental release of this preparation.

**7. Handling and Storage**

**7.1 Handling**

Keep Separate from acids. See incompatibility information in Heading 10.

**7.2 Storage**

NO special conditions are needed for safe storage. See Heading 10 for incompatibilities. Store in original container. Keep tightly closed until used. There is minimal danger to the environment from a storage release.

**7.3 Specific Use**

The intended or recommended use of this preparation is as a FIRE EXTINGUISHING AGENT.

**8. Exposure Controls/Personal Protection**

**8.1 Exposure limit values**

There are currently NO occupational exposure limit values for this preparation or any components.

**8.2 Exposure Controls**

**8.2.1. Occupational exposure controls**

**8.2.1.1. Respiratory protection**

Not expected to be needed. Vapors will be water.

**8.2.1.2. Hand Protection**

Use rubber gloves when handling the preparation.

**8.2.1.3. Eye Protection**

Use safety glasses with side shields or safety goggles.

**8.2.1.4. Skin Protection**

No special equipment is needed.

**8.2.2. Environmental exposure controls**

No special equipment is needed.

**9. Physical and Chemical Properties**

**9.1 General Information**

Appearance:	Clear colorless liquid
Odor:	None

**9.2 Important health, safety, and environmental information**

pH:	11 to 13 (at 25 ° C)
Boiling point/boiling range:	About 110 ° C (About 230 ° F)

**9. Physical and Chemical Properties (continued)**

Flash point:	None to boiling.
Flammability (solid/gas):	Not flammable
Explosive properties:	Not explosive
Oxidizing properties:	Not an oxidizer
Vapor Pressure:	About 12mm Hg
Relative Density (Water=1)	About 1.4
Solubility:	
- Water Solubility:	Completely soluble
- Fat Solubility:	Not soluble
Partition coefficient, n-octanol/water:	Not determined
Viscosity:	Not determined
Vapor density:	Not determined
Evaporation rate (Butyl acetate = 1):	N/A

**9.3 Other Information**

Auto ignition temperature: Does not ignite

**10. Stability and Reactivity**

**10.1 Conditions to avoid**

There are no known conditions such as temperature, pressure, light, shock, etc., which may cause a dangerous reaction.

**10.2 Materials to avoid**

Ammonium compounds, acids, corrodible metals (copper aluminum).  
 Reactive metals may react with the water in this preparation.  
 Energized electrical equipment may cause a shock hazard when this fire extinguishing agent is used.

**10.3 Hazardous decomposition product**

Normally stable  
 Hazardous polymerization will not occur.  
 Combustion or decomposition products include CO<sub>2</sub>, CO.

**11. Toxicological Information**

Toxicity data has not been determined for this product.  
 Potassium Carbonate: Oral LD<sub>50</sub> (rat) = 1870 mg/kg.

**12. Ecological Information**

**12.1 Ecotoxicity**

Not determined

**12.2 Mobility**

Not determined

**12. Ecological Information (continued)**

**12.3 Persistence and degradability**  
Not determined

**12.4 Bioaccumulative potential**  
Not determined

**12.5 Other adverse effects**  
 Ozone depletion potential: None  
 Photochemical ozone creation potential: None  
 Global warming potential: Release of carbon dioxide by thermal decomposition or chemical reaction could contribute to global warming.

**13. Disposal Considerations**

No harm to the environment is expected from this preparation.  
 Dispose of in compliance with national, regional, and local provisions that may be in force.

**14. Transport Informtaion**

Hazard Class or Division: Not hazardous  
 There are no special precautions known.  
 No harm to the environment is expected from this preparation.

**15. Regulatory Information**

EU Classification: Irritant  
 Exposure Limit Values: None  
 EINECS Status: All components are included in EINECS Inventory or are exempt from listing  
 EPA TSCA Status: All components are included in the TSCA Inventory or are exempt from listing.  
 Canadian DSL (Domestic Substances List): All components are included in the DSL or are exempt from listing.  
 Environmental restrictions: None are known  
 Restrictions on Marketing and Use: None are known  
 Refer to any other national measures that may be relevant

**16. Other Information**

EU Classification: Irritant  
 R 36/37/38 Irritating to eyes, respiratory system, and skin.  
 S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

