

**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

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 CO₂, CO.

11. Toxicological Information

Toxicity data has not been determined for this product.
 Potassium Carbonate: Oral LD₅₀ (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

16. Other Information (continued)

S 36 Wear suitable protective clothing
The EU Classification has been changed in accordance with Directive 1999/45/EC and information in the EINECS ESIS files (Existing Substances Information System).
Toxicological information added from the EINECS ESIS (Existing Substances Information System)
A rating under WHMIS has been added, following Canadian guidelines.

(HMIS) HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS:			
HEALTH:	<u>2</u>	4. Severe Hazard	
FLAMMABILITY:	<u>0</u>	3. Serious Hazard	
REACTIVITY:	<u>0</u>	2. Moderate Hazard	
		1. Slight Hazard	
		0. Minimal Hazard	

(WHMIS) CANADIAN WORKPLACE HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS:

This product is rated: **D2B – Product may irritate skin, eyes, or mucous membrane.**

Format is from directive 2001/58/EC
EINECS data is from <http://exb.jrc.it/exisitng-chemicals/>

17. Disclaimer

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. BUCKEYE FIRE EQUIPMENT COMPANY SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

N/A = Not Applicable

NDA = No Data Available

MSDS available at www.buckeyef.com