

Wet Chemical Solution (Fire Extinguishing Agent, Pressurized and Non-pressurized)

#### 1. IDENTIFICATION

Product Name Wet Chemical Solution

(Fire Extinguishing Agent, Pressurized and Non-

pressurized)

Other Names AC-100, AC-250, Potassium Acetate, Class K

Recommended use of the chemical and

restrictions on use

**Identified uses** Fire Extinguishing Agent

**Restrictions on use**Do not use on electrically energized equipment. Consult

applicable fire protection codes.

Company Identification Badger Fire Protection

8767 Seminole Trail, Suite 202

Ruckersville, VA 22968

USA

**Customer Information Number Emergency Telephone Number** 

CHEMTREC Number

(434)-964-3200

(800) 424-9300 (703) 527-3887 (International)

July 11, 2019

November 23, 2016

Safety Data Sheet prepared in accordance with OSHA's Hazard Communication Standard (29 CFR 1910.1200, the Canadian Hazardous Products Regulations (HPR) and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

## 2. HAZARD IDENTIFICATION

Issue Date
Supersedes Date

This SDS covers the product listed above as sold in pressurized and non-pressurized containers. GHS classifications for both forms are listed below.

## **GHS Classification - Pressurized**

## **Hazard Classification**

Gas under pressure - Compressed gas

## **Label Elements**

Hazard Symbols



Signal Word: Warning

## **Hazard Statements**

Contents under pressure; may explode if heated.

Precautionary Statements Prevention None

Response

None

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## 2. HAZARD IDENTIFICATION

#### Storage

Protect from sunlight. Store in well-ventilated place.

## Disposal

None

## **GHS Classification: Non - pressurized**

#### **Hazard Classification**

This product is classified as not hazardous in accordance with the Globally Harmonized System of Classification and Labelling (GHS).

## **Label Elements**

Hazard Symbols

None

Signal Word: None

#### **Hazard Statements**

None

## **Precautionary Statements**

**Prevention** 

None

## Response

None

## **Storage**

None

#### Disposal

None

#### Other Hazards

Possible electrocution hazard if used on electrically energized equipment.

## **Specific Concentration Limits**

The values listed below represent the percentages of ingredients of unknown toxicity.

Acute oral toxicity 0%
Acute dermal toxicity 0%
Acute inhalation toxicity 0%
Acute aquatic toxicity 0%

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Component CAS Number Concentration\*

Potassium Acetate 127-08-2 30 - 60%

Note: Pressurized product uses nitrogen or compressed air as the expellant.

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<sup>\*</sup>Exact concentration withheld as trade secret.



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#### 4. FIRST- AID MEASURES

## Description of necessary first-aid measures

#### **Eves**

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 skin thoroughly 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.

## Most important symptoms/effects, acute and delayed

Aside from the information found under Description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.

## Indication of immediate medical attention and special treatment needed Notes to Physicians

Treat symptomatically.

## 5. FIRE - FIGHTING MEASURES

#### Suitable Extinguishing Media

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

## Specific hazards arising from the chemical

Pressurized containers may explode in heat of fire.

## **Special Protective Actions for Fire-Fighters**

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

## 6. ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing. Prevent skin and eye contact. Remove leaking container to a safe place. Ventilate the area.

## **Environmental Precautions**

Prevent large quantities of the material from entering drains or watercourses.

## Methods and materials for containment and cleaning up

Contain and absorb using appropriate inert material. Transfer into suitable containers for recovery or disposal.

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#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

Wear appropriate protective clothing. Prevent skin and eye contact.

## Conditions for safe storage

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## **Control parameters**

Exposure limits are listed below, if they exist.

#### **Potassium Acetate**

None

## Appropriate engineering controls

Use with adequate ventilation. If this product is used in a pressurized system, there should be local procedures for the selection, training, inspection and maintenance of this equipment. When used in large volumes, use local exhaust ventilation.

## Individual protection measures

## **Respiratory Protection**

Not normally required. In oxygen deficient atmospheres, use a self contained breathing apparatus, as an air purifying respirator will not provide protection.

#### **Skin Protection**

Gloves

## **Eye/Face Protection**

Chemical goggles or safety glasses with side shields.

## **Body Protection**

Normal work wear.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## Non- Pressurized

**Odor Threshold** 

**Appearance** 

Odor

Physical State Liquid

Color Clear or blue Odorless Not applicable No data available

Specific Gravity 1.19-1.24 Boiling Range/Point (°C/F) 100/212

Melting Point (°C/F)

Flash Point (PMCC) (°C/F)

Vapor Pressure

Evaporation Rate (BuAc=1)

No data available

Not applicable

No data available

Solubility in Water Soluble

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Vapor Density (Air = 1) Not applicable

VOC (g/l) None VOC (%) None

Partition coefficient (n- No data available

octanol/water)

Viscosity

Auto-ignition Temperature

Decomposition Temperature
Upper explosive limit
Lower explosive limit
Flammability (solid, gas)

No data available
Not applicable
Not applicable
Not applicable
Not applicable

Expellant - Nitrogen

**Appearance** 

Odor

Physical State Compressed gas

Color Colorless None

Odor Threshold No data available PH Not applicable

Specific Gravity 0.075 lb/ft<sup>3</sup> @70°F as vapor

Boiling Range/Point (°C/F)

Melting Point (°C/F)

Flash Point (PMCC) (°C/F)

Vapor Pressure

Evaporation Rate (BuAc=1)

Solubility in Water

Vapor Density (Air = 1)

-196°C/-321°F

No data available

No data available

No data available

No data available

VOC (g/l) None VOC (%) None

Partition coefficient (n- No data available

octanol/water)

Viscosity
Auto-ignition Temperature
Decomposition Temperature
Upper explosive limit
Lower explosive limit
Flammability (solid, gas)

Not applicable
No data available
Not explosive
Not explosive
Not flammable

#### 10. STABILITY AND REACTIVITY

## Reactivity

Pressurized containers may rupture or explode if exposed to heat.

## **Chemical Stability**

Stable under normal conditions.

## Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### **Conditions to Avoid**

Exposure to direct sunlight - contact with incompatible materials

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## 10. STABILITY AND REACTIVITY

## **Incompatible Materials**

Strong oxidizing agents - water reactive materials

## **Hazardous Decomposition Products**

Oxides of carbon - potassium

#### 11. TOXICOLOGICAL INFORMATION

## **Acute Toxicity**

Potassium Acetate

Oral LD50 (Rat) 3250 mg/kg

Dermal LD50 (Rabbit) >20,000 mg/kg (analogous compound)

Inhalation LC50(rat) >5.6 mg/l (analogous compound)

Nitrogen

Simple asphyxiant

## Specific Target Organ Toxicity (STOT) - single exposure

Potassium Acetate: No data available

<u>Nitrogen:</u> Exposure to nitrogen gas at high concentrations can cause suffocation by reducing oxygen available for breathing. Breathing very high concentrations can cause dizziness, shortness of breath, unconsciousness or asphyxiation.

## Specific Target Organ Toxicity (STOT) - repeat exposure

Potassium Acetate: No data available

## Serious Eye damage/Irritation

Potassium Acetate: Not irritating (rabbit)

## Skin Corrosion/Irritation

Potassium Acetate Not irritating (rabbit)

## Respiratory or Skin Sensitization

<u>Potassium Acetate:</u> Available data indicates this component is not expected to cause skin sensitization. No data available for respiratory sensitization.

#### Carcinogenicity

Not considered carcinogenic by NTP, IARC, and OSHA.

#### **Germ Cell Mutagenicity**

Potassium Acetate: Available data indicates this component is not expected to be mutagenic.

## Reproductive Toxicity

<u>Potassium Acetate:</u> Available data indicates this component is not expected to cause reproductive toxicity or birth defects.

#### **Aspiration Hazard**

Not an aspiration hazard.

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## 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

Potassium Acetate:

LC50 Zebrafish 1497 mg/l 96h

EC50 Daphnia magna 420 mg/l 48h

EC50 Mann diatom 500 mg/l 72hr

## Mobility in soil

No relevant studies identified.

## Persistence/Degradability

No relevant studies identified.

#### **Bioaccumulative Potential**

No relevant studies identified.

#### Other adverse effects

No relevant studies identified.

## 13. DISPOSAL CONSIDERATIONS

## **Disposal Methods**

Dispose of container in accordance with all applicable local and national regulations.

#### 14. TRANSPORT INFORMATION

Safety Data Sheet information is intended to address a specific material and not various forms or states of containment.

## Special Precautions for Shipping:

Individuals must be certified as Hazardous Material Shipper for all transportation modes. Pressurized Fire Extinguishers are considered a hazardous material by the US Department of Transportation and Transport Canada.

**DOT CFR 172.101 Data** Fire extinguishers, 2.2, UN1044

**UN Proper Shipping Name** Fire extinguishers

UN Class (2.2)
UN Number UN1044
UN Packaging Group Not applicable

Classification for AIR Consult current IATA Regulations prior to shipping by air.

Transportation (IATA)

Classification for Water Consult current IMDG Regulations prior to shipping by water.

**Transport IMDG** 

When shipping via ground, portable fire extinguishers pressurized to less than 241 psi and of less than 1100 cubic inches in size meet the requirements of "Limited Quantity" as referenced in 49 CFR 173.309 (2010). There is no limited quantity designation for fire extinguishers when shipped by air or water. This section is believed to be accurate at the time of preparation. It is not intended to be a complete statement or summary of the applicable laws, rules, or hazardous material regulations, and is subject to change. Users have the responsibility to confirm compliance with all laws, rules, and hazardous material regulations in effect at the time of shipping.

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#### 15. REGULATORY INFORMATION

## United States TSCA Inventory

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

## **Canada DSL Inventory**

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.

SARA Title III Sect. 311/312 Categorization: Pressurized

Gas under pressure

SARA Title III Sect. 311/312 Categorization: Non-pressurized

None

## SARA Title III Sect. 313

This product does not contain any chemicals that are listed in Section 313 at or above de minimis concentrations.

## 16. OTHER INFORMATION

## **NFPA Ratings**

NFPA Code for Health - 1

NFPA Code for Flammability - 0

NFPA Code for Reactivity - 0

NFPA Code for Special Hazards - None

#### Legend

ACGIH: American Conference of Governmental Industrial Hygienists

CAS#: Chemical Abstracts Service Number

EC50: Effect Concentration 50%

IARC: International Agency for Research on Cancer

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

N/A: Denotes no applicable information found or available OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit TLV: Threshold Limit Value

TSCA: Toxic Substance Control Act

Revision Date: July 11, 2019 Replaces: November 23, 2016

Changes made: Update to sections 1, 3, 15 and 16.

## **Information Source and References**

This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

Prepared By: EnviroNet LLC.

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## 16. OTHER INFORMATION

The information and recommendations presented in this MSDS are based on sources believed to be accurate. Badger Fire Protection assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the material for their particular purposes. In particular, we make NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should ensure that any use or disposal of the material is in accordance with applicable Federal, State, and local laws and regulations.

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