

# SAFETY DATA SHEET

## 1. Product and Manufacturer Identification

Date: 01/01/2024

**Product identifier:** SUPPRESSALL- Condensed Aerosol Generators

**Manufacturer:** Fire Suppression Industries 1225 Carnegie St. Unit 102 Rolling Meadows, IL 60008

**24 Hour Emergency Contact:INFOTRAC Emergency phone: 1-800-535-5053**

**Intl. Customers: +01-352-323-3500 Collect Calls are accepted Contract # 1156633**

**Recommended use:** Fire Suppression Agent

**Restrictions of use:** On Contact with hot surfaces potassium nitrate decomposes forming nitrogen oxides and oxygen, which increase fire danger.

## 2. HAZARD IDENTIFICATION Flammable Solids, 4.1

Possible exposure to aerosol suppression agent if generator is activated. May cause temporary, mild irritation of mucous membrane if inhaled.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS.

| Components – Chemical (Hazardous Components ≥ 1%)       | CAS#       | EINECS #   | % of each | Comments   |
|---|------------|------------|-----------|--|
| Potassium Nitrate: KNO3                                 | 7757-79-1  | 231-818-8  | 75%       | Components are blended and pressed into a highly stable, molded form. Molded composition is contained within a sealed double-walled stainless-steel housing – no environmental exposure. |
| Epoxy Resin Polymer. BISPHENOL A DIGLYCIDYL ETHER RESIN | 25068-38-6 | 25068-38-6 | 23%       | Upon unit activation these chemical elements are not discharged from the unit but are fully consumed by a thermal reaction.  |
| Magnesium.  | 7439-95-4. | 231-104-6  | 2%        |  |
| <b>Appearance &amp; Odor:</b>                           |            |            |           | Beige to white in color. No odor.  |
| <b>Auto-Ignition Temperature:</b>                       |            |            |           | ≥350°C   |
| <b>Solubility in Water:</b>                             |            |            |           | Slightly Soluble   |

## 4. FIRST AID MEASURES

| Contact Method:     | Procedure:                      |
|---------------------|---------------------------------|
| <b>Inhalation</b>   | Remove to fresh air             |
| <b>Eye Contact</b>  | Flush with water                |
| <b>Skin Contact</b> | Wash with soap and water.       |
| <b>Ingestion</b>    | Not a likely route of exposure. |

**Seek medical attention for further treatment, observation, and support if necessary.**

## 5. FIRE FIGHTING MEASURES

In the event of a fire, evacuate the area and inform emergency services. Ignition produces a fire-suppression aerosol. Water may be used as an additional suppression agent.

## 6. ACCIDENTAL RELEASE MEASURES

If these devices are spilled, they can be safely recovered by hand and should be inspected for damage prior to repacking. Suspect or damaged articles should be labeled and consigned for correct destruction.

# SAFETY DATA SHEET

## 7. HANDLING AND STORAGE

Store in temperate conditions. Avoid shock, electric currents, static discharge, excessive heat and extended periods of storage at temperatures greater than 65°C.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

### Occupational Exposure Controls

|                               |   |
|-------------------------------|---|
| <b>Respiratory Protection</b> | Ventilate area completely after discharge. Do not enter area prior to complete venting of enclosure. Mechanical ventilation is preferred. Dust mask where dustiness is prevalent, or TLV is exceeded. Use of mechanical filter respirator if exposure is prolonged. |
| <b>Hand Protection</b>        | Wear gloves if handling generators prior to cooling. Use chemical resistant gloves when handling the preparation  |
| Eye Protection                | Safety glasses are advisable. Chemical goggles recommended as mechanical barrier for prolonged exposure   |
| <b>Skin Protection</b>        | N/A   |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|  |   |
|--|---|
| <b>Appearance:</b><br><b>Odor:</b><br><b>pH:</b><br><b>Boiling point/boiling range:</b><br><b>Flash point: None.</b><br><b>Flammability (solid/gas):</b><br><b>Explosive properties:</b><br><b>Vapor pressure:</b><br><b>Relative density (Water = 1):</b><br><b>Solubility:</b><br><b>-Water solubility:</b><br><b>-Fat solubility:</b><br><b>Partition coefficient, n-octanol/water:</b><br><b>Viscosity: Not applicable.</b><br><b>Vapor density (Air = 1):</b><br><b>Evaporation rate (Butyl Acetate = 1</b><br><b>Auto-ignition temperature</b> | White to Light grey<br>None<br>Not applicable.<br>Not applicable.<br>Not Flammable<br>Not Explosive<br>Not applicable.<br>Not applicable.<br>Partially soluble<br>Not soluble<br>Not determined<br>Not applicable.<br>Not applicable.<br>Does not auto-ignite |
|--|---|

## 10. STABILITY AND REACTIVITY

These devices are extremely stable below 125°C. They should be protected from fire, sources of electrical power, shock, and high temperatures.

### Conditions to Avoid

On Contact with hot surfaces potassium nitrate decomposes forming nitrogen oxides and oxygen, which increase fire danger.

### Materials to Avoid

Potassium nitrate reacts at high temperatures with combustible and reducing materials. Reacts violently with aluminum, aluminum oxide, and acetic anhydride causing fire hazard.

### Hazardous Decomposition Products

Hazardous polymerization will NOT occur.

Combustion or decomposition products may include NO<sub>x</sub>, K<sub>2</sub>O, CO.

# SAFETY DATA SHEET

## 11. TOXICOLOGICAL INFORMATION

The toxicity of the product mixture has not been determined.

### Components:

#### Potassium Nitrate

**Toxicity Data:** Oral LD50 (rat) 3750 mg/kg.

**Target Organs:** Blood, central nervous system

#### Magnesium

**Toxicity Data:** Oral LDLO (dog) 230 mg/kg.

**Target Organs:** Central nervous system, liver, and kidneys.

#### Epoxy Resin Polymer

**Irritation Data:** Skin (guinea pig) 2750 mg/55 days Inert.

**Irritation Data:** Eye (rabbit) 100 mg Mild.

**Toxicity Data:** Oral LD50 (rat) 11.4 g/kg.

Toxic by-products of combustion are extremely low. Main by-products are listed below with 15-minute TWA values for a maximum 100g/m<sup>3</sup> concentration in a hermetically sealed volume.

| Gas             | 15-minute Time Weighted Average in parts per million |
|-----------------|--|
| NO <sub>2</sub> | 1.08   |
| NO              | 0.97   |
| CO              | 84.20  |

## 12. ECOLOGICAL INFORMATION

**These devices are sealed and present no ecological hazards.**

**Components:** Potassium Nitrate

Fish Poecilia reticulata LC50 (24 hr.) 1927 mg/L.

Fish Poecilia reticulata LC50 (96 hr.) 1378 mg/L.

Crustacea Daphnia magna TLm (24 hr.) 490 mg/L.

**Mobility:** Not determined.

**Persistence and Degradability:** Not determined.

**Bio accumulative Potential:** Not determined.

**Other Adverse Effects**

**Ozone depletion potential:** None.

**Photochemical ozone creation potential:** None.

**Global warming potential:** None

## 13. DISPOSAL CONSIDERATIONS

This preparation, if spilled, is a hazardous waste. It is a flammable solid.

Keep from entering surface water. (See heading 12)

Dispose of in compliance with national, regional, and local provisions that may be in-force.

Comply with all local, state, and federal/international regulation

## 14. TRANSPORT INFORMATION

| UN Number: 3178   | Shipping Limitations: |                                |
|---|-----------------------|--------------------------------|
| UN Classification: 4.1<br>Flammable solid,<br>inorganic, n.o.s. (fire<br>suppressant<br>containing potassium nitrate) | Cargo Air             | Max single packaging – 100 kg. |
|   | Ocean Cargo           | Max single packaging- 10kg.    |
| Packaging Group: III  | Passenger Air         | Max single packaging – 25 kg.  |

**Division 4.1 articles present no significant hazard as packaged for transport.**

# SAFETY DATA SHEET

## 15. REGULATORY INFORMATION

|     |   |
|-----|---|
| S15 | Keep away from heat   |
| S33 | Take precautionary measures against risk of static discharge            |
| S35 | This material and its container must be disposed of in a safe way       |
| S38 | In case of insufficient ventilation wear suitable respiratory equipment |
| S39 | Wear eye/face protection  |

## 16. OTHER INFORMATION

Comply with manufacturer's installation and maintenance procedures.