SAFETY DATA SHEET

1. Product and Manufacturer Identification

Product identifier: SUPPRESSALL- Condensed Aerosol Generators
Manufacturer: Fire Suppression Industries 1225 Carnegie St. Unit 102 Rolling Meadows, IL 60008
24 Hour Emergency Contact: FSI Emergency phone: 1-800-564-8611
Intl. Customers: +01-847-419-3700 Collect Calls are accepted
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%**	
Appearance & Odor:				Beige to white in color. No odor.
Auto-Ignition Temperature:				≥350°C
Solubility in Water:				Slightly Soluble

4. FIRST AID MEASURES

Contact Method:	Procedure:
Inhalation	Remove to fresh air
Eye Contact	Flush with water
Skin Contact	Wash with soap and water.
Ingestion	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.

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

Respiratory Protection	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.
Hand Protection	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
Skin Protection	N/A

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to Light grey
Odor:	None
pH:	Not applicable.
Boiling point/boiling range:	Not applicable.
Flash point: None.	Not Flammable
Flammability (solid/gas):	Not Explosive
Explosive properties:	Not applicable.
Vapor pressure:	Not applicable.
Relative density (Water = 1):	
Solubility:	
-Water solubility:	Partially soluble
-Fat solubility:	Not soluble
Partition coefficient, n-octanol/water:	Not determined
Viscosity: Not applicable.	Not applicable.
Vapor density (Air = 1):	Not applicable.
Evaporation rate (Butyl Acetate = 1	
Auto-ignition temperature	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 NOX, K2O, CO.

11. TOXOCOLOGICAL 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.
	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_3 concentration in a hermetically sealed volume.

Gas	15-minute Time Weighted Average in parts per million
NO_2	**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 Flammable solid, inorganic, n.o.s. (fire suppressant containing potassium nitrate)	Cargo Air	Max single packaging – 100 kg.
Packaging Group: III	Passenger Air	Max single packaging – 25 kg.
Division 4.1 articles present no significant hazard as packaged for transport.		

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.