SECTION I. Chemical Product and Company Identification

Product Name: ABC Dry Chemical Fire Extinguishant

(Fire Extinguishing Agent, Non-pressurized and Pressurized)

Synonym: Multi-Purpose Dry Chemical

Manufacturer: Shield Fire Protection

PO Box 428

Kings Mountain, NC 28086

Telephone: 704.739.7415

Web Address: www.shieldprotects.com
Email Address: info@shieldprotects.com

Recommended Use: Fire suppression, not for human or animal drug use.

Emergency: CHEMTREC 1.800.424.9300

Revision Date: 04/2019

SECTION II. Hazard Identification

Note: This SDS covers both pressurized and non-pressurized containers of the product.

GHS – Classification (Pressurized):

Hazard Classification: Gas Under Pressure-Compressed Gas

GHS Label Elements:

 \Diamond

Hazard Symbols:

Signal Word: WARNING

Hazard Statements: Contents Under Pressure: may explode if heated

Precautionary Statements: P251 Pressurized container; do not pierce or burn, even after use.

GHS – Classification (Non-pressurized):

Eye Irritation: Class 2B Skin Irritation: Class 3 Inhalation: Class 5

GHS Label Elements:



Hazard Symbols:

Signal Word: WARNING

Hazard Statements:

H313 May be harmful in contact with skin.

H320 Causes eye irritation

H333 May be harmful if inhaled.

Precautionary Statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children. P234 Keep in original container.

P251 Pressurized container; do not pierce or burn, even after use

P261 Avoid breathing dust

P264 Wash hands and face thoroughly after handling
 P270 Do not eat, drink, or smoke when using this product
 P281 Use personal protective equipment as required

P285	In case of inadequate ventilation, wear respiratory protection
P301+322+331	If swallowed, drink 2-3 glasses of water and do not induce vomiting
302+352	If on skin, wash with soap and water
304+313+341	If inhaled, and if distress occurs, remove victim to fresh air and keep at rest in a position comfortable
	for breathing. Seek medical advice/attention.
305+351+338	If in eyes, rinse cautiously with water for several minutes. Remove contact lenses if present and east
	to do, and continue to rinse.
337+313	If eye irritation persists, get medical advice/attention.
P401+402+403	Store in original container or extinguisher in a dry, well ventilated place.

SECTION III. Composition/Information on Ingredients

This product is a mixture.

Chemical Name	Weight %*	CAS #
Monoammonium phosphate	85	7722-76-1
Barium Sulfate	8	7727-43-7
Mica	< 3	12001-26-2
Amorphous Silica (non-crystalline)	< 3	112926-00-8 (7631-86-9)
Stannous octoate	< .3	301-10-0
Silicone	< .1	63148-57-2
Pigment	< .1	6358-31-2

Note: Pressurized product uses nitrogen as the expellant 7727-37-9

SECTION IV. First Aid Measures

Eye Exposure- Flush eyes with water until pain-free. If irritation develops or persists, seek medical attention.

Skin Exposure- Wash with plenty of soap and water. If irritation develops or persists, seek medical attention.

Inhalation- Move victim to fresh air. If irritation develops or persists, seek medical attention.

Ingestion- If victim is conscious and alert, give 2-3 glasses of water to drink. Do not induce vomiting. If vomiting occurs and the victim is conscious, give additional water to further dilute the chemical. Prevent aspiration of swallowed product by laying victim on side with head lower than their waist. Seek medical attention. Do not leave victim unattended.

Medical Conditions Possibly Aggravated by Exposure- Inhalation of the product may aggravate existing chronic respiratory conditions such as asthma, emphysema, or bronchitis. Contact with the skin may aggravate an existing skin disease. Chronic overexposure may cause pneumoconiosis ("Dusty Lung" disease).

SECTION V. Firefighting Measures

Extinguishing Media: N/A. This product is an extinguishing agent. It is nonflammable and noncombustible.

Special Firefighting Procedures: N/A

Unusual Fire and Explosion Hazards: This product may decompose in fire and release oxides of carbon, potassium, and nitrogen (Refer to Section X).

Sensitivity to Mechanical Impact or Static Discharge: None

SECTION VI. Accidental Release Measures

In case of accidental release, use the appropriate respiratory protection. Clean up the product using a vacuum or wet sweep and shovel to minimize the generation of dust. Bag or drum the product for disposal. If the product is used and/or contaminated, use personal protective equipment and containment means that are appropriate for the composition of the mixture. Product should be prevented from entering waterways.

^{* %} is rounded to the nearest appropriate number. Values are not to be considered product specifications

SECTION VII. Handling and Storage

Avoid eye, respiratory, and skin exposure. Use the appropriate personal protective equipment when handling. Wash thoroughly after handling (Refer to Section VIII). Product should be stored in its original container or extinguisher. When the product is contained under pressure (e.g., an extinguisher), inspect the container for rust or damage that may compromise the container integrity. Do not store the product in high humidity and do not mix with other extinguishing agents, particularly potassium bicarbonate based agents.

SECTION VIII. Exposure Controls and Personal Protection

Exposure Guidelines:

Monoamonium phosphate

OSHA PEL
Particulates Not Otherwise Classified
Particulates Not Otherwise Classified
Particulates Not Otherwise Classified

Total Dust- 15 mg/m³ Total Dust- 10 mg/m³
Respirable Fraction- 5 mg/m³ Respirable Fraction- 3 mg/m³

Barium sulfate Particulates Not Otherwise Classified Particulates Not Otherwise Classified

Total Dust- 15 mg/m³ Total Dust- 10 mg/m³ Respirable Fraction- 5 mg/m³ Respirable Fraction- 3 mg/m³

During the use of this product on fires, exhaust gases and products of incomplete combustion are the main respiratory hazards. In the manufacture of this product, employers and employees must use their collective judgment in determining the on-the-job settings where the use of a dust mask or respirator is prudent. The need for respiratory protection is not likely for short-term use in well-ventilated areas.

Respiratory Protection: Use an N-95 dust mask for limited exposures and use air-purifying respirators with high efficiency particulate air filters (HEPA filters) for prolonged exposures.

Eye Protection: Wear chemical goggles or full-face air-purifying respirator.

Skin Protection: Use nitrile, latex, or similar gloves and coveralls. Good personal hygiene practices are essential. After handling the product, avoid food, tobacco products, or other means of transferring the product from hand to mouth until after thoroughly washing.

SECTION IX. Physical and Chemical Properties

Chemical Agent

Appearance and Odor: Light yellow fine powder that is odorless.

Apparent Density: 0.82

Solubility: The product is coated with water repellant silicone. Not immediately soluble in water.

pH: Approximately 4 -5 Flash Point: N/A Flammability: N/A Vapor Pressure: N/A Boiling Point: N/A

Explosive or Oxidizing Properties: None

Expellant- Nitrogen

Appearance and Odor: Colorless and odorless. Vapor Pressure: N/A Specific Gravity: 0.075 lb/ft³@ 70°F as vapor Boiling Point: -321°F

Solubility: N/A Explosive or Oxidizing Properties: None

pH: N/A

Flash Point: Nonflammable Flammability: Nonflammable

SECTION X. Stability and Reactivity

Reactivity: Pressurized containers may rupture or explode if exposed to high heat

Stability: Stable

Incompatibles: Magnesium, strong oxidizers such as calcium hypochlorite (pool chlorine), strong alkalis, and isocyanuric acids. *Decomposition Products:* This product may decompose in fire and release carbon monoxide, carbon dioxide, and sulfur dioxide.

Oxides of phosphorous and ammonia have been reported.

Hazardous Polymerization: Will not occur

Hazardous Reactions: None

SECTION XI. Toxicological Information

Acute Toxicity: Monoammonium phosphate LD50 (rat): > 1000mg/kg body weight.

Target organs in humans: respiratory system, eyes, and skin. This product is an irritant to epithelial tissue and

may aggravate dermatitis. No indication that the product causes sensitization.

Chronic Toxicity: Pneumoconiosis, or "Dusty Lung" disease, may result from chronic exposure to any dust.

Reproductive Toxicity: This product is not known to have any reproductive effects.

Nitrogen: Simple asphyxiant. Exposure at high concentrations can cause suffocation by reducing the available oxygen.

SECTION XII. Ecological Information

Ecotoxicity: Negative effects are unknown. Provides nutrient nitrogen and phosphorous to plant life.

Degradability: Degrades rapidly in wet or humid environment.

Bioaccumulation: Unknown extent.

Mobility in Soil: Water-soluble. May leech in to groundwater.

SECTION XIII. Disposal Consideration

This product is not a RCRA characteristically hazardous or listed hazardous waste. Dispose of according to state or local laws, which may be more restrictive than federal regulations. Be aware that product used on a fire may be altered or contaminated and thereby require different disposal considerations.

SECTION XIV. Transportation Information

This product is not defined as a hazardous material under U.S. Department of Transportation 49 CFR 172, or by Transport Canada "Transportation of Dangerous Goods" regulations.

Please Note: Although this material is not considered hazardous, when contained in a stored pressure fire extinguisher pressurized with a nonflammable gas, the extinguisher itself is considered a hazardous material by the U.S. Department of Transportation (USDOT) and Transport Canada (TC). The proper shipping name shall be Fire Extinguisher and the UN Identification Number is UN 1044. The USDOT hazard class is Limited Quantity when pressurized to less than 241 psig and when shipped via highway or rail. For shipment by Air or Water consult the current IATA or IMDG Regulations respectively.

SECTION XV. Regulatory Information

International Inventory Status: All ingredients are on the following inventories

Country	<u>Agency</u>	<u>Country</u>	Agency
U.S.A.	TSCA	Australia	AICS
Canada	DSL	Japan	MITI
Europe	EINECS/ELINCS	South Korea	KECL

European Risk and Safety Phrases:

EU Classification-Harmful

R Phrases-22 Harmful if swallowed

> 36/37/38 Irritating to eyes, respiratory system, and skin.

S Phrases-26 In case of contact with eyes, rinse immediately with plenty of water and seek

medical advice

36 Wear suitable protective clothing

U.S. Federal Regulatory Information:

Non-pressurized; None of the chemicals in this product are under SARA reporting requirements or have SARA Threshold Planning Quantities or CERCLA Reportable Quantities, or are regulated under TSCA 8(d).

Pressurized: SARA Title III Section 311/312 Categorization is Pressure Hazard

State Regulatory Information:

Chemicals in this product are covered under the specific State regulations noted:

Alaska Designated Toxic and Hazardous Substances- None California Permissible Exposure Limits for Chemical Contaminants- None

Florida Substance list- Mica dust Pennsylvania Hazardous Substance List- None Illinois Toxic Substance List- None Rhode Island Hazardous Substance List- Mica dust Kansas Section 302/303 List- None Texas Hazardous Substance List- No Massachusetts Substance list- Mica dust West Virginia

Hazardous Substance List- None Minnesota List of Hazardous Substances- None Wisconsin Toxic and Hazardous Substances- None

Employer Information/Toxic Substance List- None Missouri New Jersey Right to Know Hazardous Substance List- None

List of Hazardous Chemicals, Reportable Quantities - None North Dakota

California Proposition 65- No component is listed on the California Proposition 65 List

SECTION XVI. Other Information

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

HMIS RATINGS:

Health 1 Flammability 0 Reactivity

Personal Protective Equipment: use N-95 dust mask (See Section 8)

WHMIS (Canadian Workplace Hazardous Materials Identification)

D2B- May irritate eyes, mucous membranes, and/or skin

The information contained herein is given in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made.