



SAFETY DATA SHEET

Section 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Super D Dry Powder Extinguisher
 Other Identifiers: Class D Powder, Sodium Chloride
 Product Code(s): CH 545, CH 557
 Model Codes(s) on Extinguishers: 570, 680
 Recommended Use: Fire extinguishant for metal fires Not for human or animal drug use.
 Manufacturer: SAVA FIRE EQUIPMENT INC.
 Internet Address: www.amerex-fire.com
 Address: 1085 Stacey Court
 Mississauga, ON L4W 2X7
 Company Telephone: (905) 238-6400
 E-mail Address: info@savafire.ca
 Emergency Contacts: Chemtrec 1(800) 424-9300 or (703) 527-3887
 Revised: March 14, 2018

Section 2. HAZARDS IDENTIFICATION

GHS – Classification

Health	Environmental	Physical
Acute Toxicity: Category 5	None	None
Skin Corrosion/Irritation: Category 3	None	None
Skin Sensitization: NO	None	None
Eye: Category 2A	None	Warning
STOT – Category 3	None	Warning
Carcinogen: Category None	None	None

GHS – Label Symbol(s): 
 If Pressurized: Gas Under Pressure 

GHS – Signal Word(s): **Warning**

Other Hazards Not Resulting in Classification: Mica may contain small quantities of quartz (crystalline silica). Prolonged exposure to respirable crystalline silica dust at concentrations exceeding the occupational exposure limits may increase the risk of developing a disabling lung disease known as silicosis. IARC found limited evidence for pulmonary carcinogenicity of

crystalline silica in humans. In the case of normal use of this product, exposure to silica should be nil.

The attapulgite clay used in this product has a fiber length of less than 5µm; therefore, the clay is not considered to be carcinogenic to animals or humans.

GHS – Hazard Phrases

GHS Hazard	GHS Codes(s)	Code Phrase(s)
Physical	H229	*- Contents under pressure; may explode if heated.
Health	H303 312 315 319 335	May be harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
Environmental	None	
Precautionary:		
General	P101	If medical advice is needed, have product container or label at hand.
Prevention	P251 261 264 271 280	Do not pierce or burn, even after use. Avoid breathing dust/fumes/gas/mist/vapours/spray. Wash exposed skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
Response	P312 321 302+352 304+340 305+351+338 332+313 342+311 337+313	Call a doctor if you feel unwell. Specific treatment (see Section 4. First Aid Measures) IF ON SKIN: Wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If skin irritation occurs: Get medical advice/attention. If experiencing respiratory symptoms: Call a doctor. If eye irritation persists get medical advice/attention.
Storage	P410+403	*- Protect from sunlight. Store in well-ventilated place.
Disposal	P501	Dispose of contents through a licensed disposal company. Contaminated container should be disposed of as unused product.

*- If under pressure

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	EC No.	REACH Reg. No.	CAS-No.	Weight %
Sodium chloride evaporated flour grade	231-598-3	Not Available	7647-14-5	75-90
Attapulgite clay	601-805-5	Not Available	12174-11-7	3-6
Mica-potassium aluminum silicate	310-1276	Not Available	12001-26-2	3-5
Zeolite, synthetic amorphous precipitated silica	215-283-8	Not Available	1318-02-1	1.5-3
Silica, amorphous, fumed	NA	Not Available	112945-52-5	<2
Magnesium stearate octadecanoic acid, Mg salt	228-767-9	Not Available	557-04-0	<1

Emergency overview:

Light purple, fine solid powder, odorless.

Adverse health effects and symptoms:

May be an irritant to the respiratory system; irritant to the skin and eyes. Symptoms may include coughing, shortness of breath, and irritation of the lungs, eyes, and skin. Ingestion, although unlikely, may cause gastric distress.

Section 4. FIRST AID MEASURES

Eye Exposure:

Causes irritation. Irrigate eyes with water and repeat until pain free. Seek medical attention if irritation persists, or if vision changes occur.

Skin Exposure:

Causes skin irritation. In case of contact, rinse with plenty of water. Seek medical attention if irritation persists.

Inhalation:

May cause irritation, along with coughing. If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if irritation persists.

Ingestion:

Overdose symptoms may include nausea, vomiting, diarrhea, and abdominal cramps may result from excessive salt consumption. Profuse water loss can cause unusually high blood sodium levels ('hypernatremia') with symptoms such as dizziness, low blood pressure, and reduced urine production. Serious cases may result in swelling (edema), heightened blood pressure, increased heart rate, breathing trouble, convulsions, coma, and death. If victim is conscious and alert, give plenty of water to drink and do not induce vomiting. Seek immediate medical attention if overdose symptoms appear. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist.

Medical conditions possibly aggravated by exposure:

Kidney conditions, hypertension.

Section 5. FIRE-FIGHTING MEASURES

Flammable Properties:

Not flammable

Flash Point:

Not determined

Suitable Extinguishing Media:

Extinguishing measures suitable to local circumstances and the surrounding environment

Hazardous Combustion Products:	Toxic fumes of hydrochloric acid, sodium oxide, silicone oxide.
<u>Explosion Data:</u>	
Sensitivity to Mechanical Impact:	Not sensitive
Sensitivity to Static Discharge:	Not sensitive
Unusual fire/explosion hazards:	None known
Protective Equipment and Precautions for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand. NIOSH (approved or equivalent) and full protective gear.

Section 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Avoid contact with skin, eyes, and clothing.
Personal Protective Equipment:	Minimum - safety glasses, gloves, and a dust respirator.
Emergency Procedures:	NA
Methods for Containment:	Prevent further leakage or spillage if safe to do so.
Methods for Clean Up:	Avoid dust formation. Clean up released material using vacuum or wet sweep and shovel to minimize generation of dust. Bag and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.
Environmental Precautions:	Prevent material from entering waterways.
Other:	If product is contaminated, use PPE and containment appropriate to the nature of the most toxic chemical/material in the mixture.

Section 7. HANDLING AND STORAGE

Personal Precautions:	Use appropriate PPE when handling or maintaining equipment, and wash thoroughly after handling (see Section 8).
Conditions for Safe Storage:	Keep product in original container or extinguisher. Contents may be under pressure – inspect extinguisher consistent with product labeling to ensure container integrity.
Incompatible Products:	Strong oxidizers. Reactive with metals, acids.
Hazardous Decomposition Products:	Toxic fumes of hydrochloric acid, sodium oxide, silicone oxide.
Hazardous Polymerization:	Will not occur

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	OSHA PEL	ACGIH TLV	DFG MAK *	EU BLV
Sodium chloride	PNOC** Total dust, 15 mg/m ³ Respirable fraction, 5 mg/m ³	PNOC Total dust, 10 mg/m ³ Respirable fraction, 3 mg/m ³	PNOC Total dust, 4 mg/m ³ Respirable fraction, 1.5 mg/m ³	NA
Attapulgite Clay	PNOC** Total dust, 15 mg/m ³ Respirable fraction, 5 mg/m ³	PNOC Total dust, 10 mg/m ³ Respirable fraction, 3 mg/m ³	PNOC Total dust, 4 mg/m ³ Respirable fraction, 1.5 mg/m ³	NA
Mica	PNOC Total dust, 15 mg/m ³ Respirable fraction, 5 mg/m ³	PNOC Total dust, 10 mg/m ³ Respirable fraction, 3 mg/m ³	PNOC Total dust, 4 mg/m ³ Respirable fraction, 1.5 mg/m ³	NA
Zeolite	80 mg/m ³ % SiO ₂	10 mg/m ³	4 mg/m ³	NA
Silica	PNOC Total dust, 15 mg/m ³ Respirable fraction, 5 mg/m ³	PNOC Total dust, 10 mg/m ³ Respirable fraction, 3 mg/m ³	PNOC Total dust, 4 mg/m ³ Respirable fraction, 1.5 mg/m ³	NA
Magnesium stearate octadecanoic acid, Mg salt	PNOC** Total dust, 15 mg/m ³ Respirable fraction, 5 mg/m ³	PNOC Total dust, 10 mg/m ³ Respirable fraction, 3 mg/m ³	PNOC Total dust, 4 mg/m ³ Respirable fraction, 1.5 mg/m ³	NA

*German regulatory limits **PNOC = Particulates not otherwise classified (ACGIH) also known as Particulates not otherwise regulated (OSHA) *** NR = Not Regulated. All values are 8 hour time weighted average concentrations.

Engineering Controls:

Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment – PPE Code E:

The need for respiratory protection is not probable during short-term exposure. PPE use during production process must be independently evaluated.



Eye/Face Protection:

Tightly fitting safety goggles. Contact lens may absorb and concentrate irritants; if this problem occurs, a workplace policy should be determined.

Skin and Body Protection:

Wear protective coveralls, rubber boots, PVC gloves. Use barrier cream and skin cleaning cream if concentrations are high enough to cause mild irritation.

Respiratory Protection:

If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn. Use P100 respirators for limited exposure, use air-purifying respirator (APR) with high efficiency particulate air (HEPA) filters for prolonged exposure. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current safety and health requirements. The need for respiratory protection is not likely for short-term use in well ventilated areas.

Hygiene Measures:

Good personal hygiene practice is essential, such as avoiding food, tobacco products, or other hand-to-mouth contact when handling. Wash thoroughly after handling.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Fine crystals, off-white
Molecular Weight:	NaCl: 58.44 g/mol; Zeolite: 162 g/mol
Odor:	None
Odor Threshold:	No information available (NIA)
Decomposition Temperature °C:	NIA
Freezing Point °C:	NIA
Initial Boiling Point °C:	NaCl: 100 at 750mm Hg; Zeolite: NIA
Physical State:	Crystalline Powder
pH:	NaCl: Approximately 6.7 – 7.3 for a 10% solution; Zeolite: 1.2 – 1.3
Flash Point °C:	NaCl: 1413; Zeolite: NIA
Autoignition Temperature °C:	NIA
Boiling Point/Range °C:	NaCl: 100 at 750mm Hg; Zeolite: NIA
Melting Point/Range °C:	NaCl: 801; Zeolite: > 500
Flammable:	Not Flammable
Flammability Limits in Air °C:	Upper: None; Lower: None
Explosive Properties:	None
Oxidizing Properties:	None
Volatile Component (%vol)	NIA
Evaporation Rate:	NIA
Vapor Density:	Not Applicable
Vapor Pressure:	NaCl: 1 mm Hg at 865 °C; Zeolite: NIA
Specific gravity:	NaCl: Approximately 2.17 at 25 °C; Zeolite: 2.3 – 2.7
Solubility:	Miscible
Partition Coefficient:	NIA
Viscosity:	Not Applicable

NOTE: NACL-Sodium Chloride; NIA – No Information available

Section 10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage and handling conditions.

Reactivity: Generally unreactive.

Incompatibles: Strong oxidizers.

Conditions to Avoid: Storage or handling near incompatibles.

Hazardous Decomposition Products: Heat of fire may release toxic fumes of hydrochloric acid, sodium oxide, silicone oxide.

Possibility of Hazardous Reactions: None

Hazardous Polymerization: Does not occur

Section 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, skin and eye contact. Ingestion

Symptoms:

 Immediate:

 Inhalation: Irritation, coughing.

 Eyes: Irritation.

 Skin: Irritation.

 Ingestion: May cause irritation of gastrointestinal tract.

 Delayed: Symptoms may be delayed

Acute Toxicity: Slightly toxic.

Chronic Toxicity:

 Short-term Exposure: None known.

 Long-term Exposure: As with all dusts, pneumoconiosis, or “dusty lung” disease, may result from chronic exposure.

Acute Toxicity Values - Health

Chemical Name	LD50		LC50 (Inhalation)
	Oral	Dermal	
Sodium chloride	3000 mg/kg (rat); (TDL human 12357 mg/kg/23d)	10000 mg/kg (rabbit)	None
Attapulgate clay	None	None	None
Mica	None	None	None
Zeolite	None	None	None
Silica	None	None	None
Magnesium stearate octadecanoic acid, Mg salt	None	None	None

Reproductive Toxicity: This product’s ingredients are not known to have reproductive or teratogenic effects.

Target Organs and Effects (TOST): Respiratory system (mild irritant).

This product is an irritant to epithelial tissue, (eyes, mucous membranes, skin) and may aggravate dermatitis. No information was found indicating the product causes sensitization. May be a kidney toxicant at high doses. May cause pulmonary edema and respiratory arrest at very high doses.

Other Toxicity Categories

Chemical Name	Germ Cell Mutagenicity	Carcinogenicity	Reproductive	TOST Single Exp	TOST Repeated Exp	Aspiration
Sodium chloride	None	None	None	None	None	None
Attapulgite clay	None	None	None	None	Kidney	None
Mica						
Zeolite	None	None	None	None	None	None
Silica	None	None	None	None	None	None
Magnesium stearate octadecanoic acid, Mg salt	None	None	None	None	None	None

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity:	Can be toxic in high concentrations.
Persistence/Degradability:	Degrades rapidly to chloride ion in wet environments, but the chloride ion is very persistent.
Probability of rapid biodegradation:	Est: 0.731 (Rapid)
Anaerobic biodegradation probability:	Est: 0.836 (Rapid)
Bioaccumulation potential:	Low.
Bioconcentration factor:	3.16 L/kg
Bioaccumulation Potential:	Low. CT50 (days): LogP<3
Mobility in soil:	Log Koc: Est: 0.400
Log Koa:	Not applicable
Log Kaw:	Not applicable
Atmospheric oxidation half-life:	20.6 days
Level III Fugacity Model:	No information
<u>Other Adverse Ecological Effects:</u>	No other known effects at this time

Aquatic Toxicity Values - Environment

Chemical Name	Acute (LC50)	Chronic (LC50)
Sodium chloride	9,498 (96h)-Rainbow Trout	Cat IV; 1300 mg/l (rainbow trout), 670 mg/l (water flea)
Attapulgite clay	N/A	N/A
Mica	N/A	N/A
Zeolite		
Silica	N/A	N/A
Magnesium stearate octadecanoic acid, Mg salt	N/A	N/A

Aquatic Toxicity Values – Calculated Estimates

Chemical Name	Acute (LC50)	EC50
Sodium chloride	597 mg/l Fish 96hr 296 mg/l Daphnia 48 hr	597 mg/l Gr Algae 96hr
Attapulgate clay	N/A	N/A
Mica	N/A	N/A
Zeolite		
Silica	N/A	N/A
Magnesium stearate octadecanoic acid, Mg salt	N/A	N/A

Section 13. DISPOSAL CONSIDERATIONS

Safe Handling

Keep formation of airborne dust to a minimum. Avoid breathing dust. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Use appropriate PPE when handling, and wash thoroughly after handling (see Section 8).

Waste Disposal Considerations

Dispose in accordance with federal, state, and local regulations.

Contaminated Packaging

Dispose in accordance with federal, state, and local regulations.

NOTES:

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 laws or regulations. Used product may be altered or contaminated, creating different disposal considerations.

Section 14. TRANSPORT INFORMATION

UN Number: NA
 UN Proper Shipping Name: NA
 Transport Hazard Class: NA
 Packing Group: NA
 Marine Pollutant?: NA

IATA Not regulated

DOT Not regulated

NOTES:

Special Precautions for Shipping:

The transportation information above covers the Super D Dry Powder extinguisher agent as shipped in bulk containers and not when contained in fire extinguishers or fire extinguisher systems. If

shipped in a stored pressure-type fire extinguisher, and pressurized with a non-flammable, non-toxic inert expellant gas, the fire extinguisher is considered a hazardous material by the US Department of Transportation and Transport Canada. The proper shipping name shall be FIRE EXTINGUISHER and the UN designation is UN 1044. The DOT hazard class/division is LIMITED QUANTITY when pressurized to less than 241 psig and when shipped via highway or rail. UN Class 2.2. Non-Flammable Gas, when shipping via air. Packing Group – N/A

Section 15. REGULATORY INFORMATION

International Inventory Status: Sodium chloride is on the following inventories

Country(ies)	Agency	Status
United States of America	TSCA	Yes
Canada	DSL	Yes
Europe	EINECS/ELINCS	Yes
Australia	AICS	Yes
Japan	MITI	Yes
South Korea	KECL	Yes

REACH Title VII Restrictions: No information available

Chemical Name	Dangerous Substances	Organic Solvents	Harmful Substances Whose Names Are to be Indicated on Label	Pollution Release and Transfer Registry (Class II)	Pollution Release and Transfer Registry (Class I)	Poison and Deleterious Substances Control Law
Sodium Chloride	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Component	ISHA – Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA – Harmful Substances Requiring Permission	Toxic Chemical Classification Listing (TCCL) – Toxic Chemicals	Toxic Release Inventory (TRI) – Group I	Toxic Release Inventory (TRI) – Group II
Sodium chloride	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Attapulgite clay	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Mica	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Zeolite	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Silica	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Magnesium stearate octadecanoic acid, Mg salt	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

European Risk and Safety phrases:

EU Classification: XN Irritant
 R Phrases: 20 Harmful by inhalation.
 36/37 Irritating to eyes, respiratory system.

S Phrases:	22	Do not breath dust.
	24/25	Avoid contact with skin and eyes
	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:

SARA 313:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) - This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

None of the chemicals in this product are under SARA reporting requirements or have SARA threshold planning quantities (TPQs) or CERCLA reportable quantities (RQs), or are regulated under TSCA 8(d).

SARA 311/312 Hazard Categories:

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard-*	Yes
Reactive Hazard	No

* - Only applicable if material is in a pressurized extinguisher.

Clean Water/Clean Air Acts:

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42) or Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61) and Section 112 of the Clean Air Act Amendments of 1990.

U.S. State Regulatory Information:

Chemicals in this product are covered under specific State regulations, as denoted below:

- Alaska** - Designated Toxic and Hazardous Substances: None
- California** – Permissible Exposure Limits for Chemical Contaminants: None
- Florida** – Substance List: Mica Dust
- Illinois** – Toxic Substance List: None
- Kansas** – Section 302/303 List: None
- Massachusetts** – Substance List: Mica Dust
- Minnesota** – List of Hazardous Substances: None
- Missouri** – Employer Information/Toxic Substance List: None
- New Jersey** – Right to Know Hazardous Substance List: None
- North Dakota** – List of Hazardous Chemicals, Reportable Quantities: None

