



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: AMEREX CORPORATION
Internet Address: www.amerex-fire.com
Address: 7595 Gadsden Highway, P.O. Box 81
Trussville, AL 35173-0081
Company Telephone: (205) 655-3271
E-mail Address: info@amerex-fire.com
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

Other Adverse Ecological Effects: 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

Pennsylvania – Hazardous Substance List: None

Rhode Island – Hazardous Substance List: Mica Dust

Texas – Hazardous Substance List: No

West Virginia – Hazardous Substance List: None

Wisconsin – Toxic and Hazardous Substances: None

California Proposition 65: No component is listed on the California Proposition 65 list.

Other:

Canada – WHMIS Hazard Class

No component listed

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|--------------------------------------|
| Section 16. OTHER INFORMATION |
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This SDS conforms to requirements under U.S., U.K., Canadian, Australian, and EU regulations or standards, and conforms to the proposed 2003 ANSI Z400.1 format.

| | |
|----------------|---------------|
| Issuing Date | 17-June-2012 |
| Revision Date | 14-March-2018 |
| Revision Notes | None |

The information herein is given in good faith but no warranty, expressed or implied, is made.
Updated by William F. Garvin, CIH.