

# MATERIAL SAFETY DATA SHEET

## Section 1. Chemical product and company identification

Product Name:	Regular Dry Chemical Extinguishant
Synonym:	Sodium Bicarbonate, SDC
Manufacturer:	AMEREX CORPORATION
Internet Address:	<a href="http://www.amerex-fire.com">www.amerex-fire.com</a>
Address:	7595 Gadsden Highway P.O. Box 81 Trussville, AL 35173-0081
Telephone:	(205) 655-3271
Emergency Contacts:	Chemtrec 1(800) 424-9300 or (703) 527-3887
Revised:	January, 2015

## Section 2. Hazard identification and emergency overview

Emergency overview: white, fine solid powder, odorless.

Adverse health effects and symptoms: mildly irritating to the respiratory system and eyes. Symptoms may include coughing, shortness of breath, and irritation of the lungs, eyes, and skin. Ingestion, although unlikely, may cause gastrointestinal irritation and edema (fluid retention).

Exposure guidelines:

Ingredients	OSHA PEL	ACGIH TLV	DFG MAK *
Sodium bicarbonate	PNOC** Total dust, 15 mg/m <sup>3</sup> Respirable fraction, 5 mg/m <sup>3</sup>	PNOC Total dust, 10 mg/m <sup>3</sup> Respirable fraction, 3 mg/m <sup>3</sup>	PNOC Total dust, 4 mg/m <sup>3</sup> Respirable fraction, 1.5 mg/m <sup>3</sup>
Fullers Earth	PNOC Total dust, 15 mg/m <sup>3</sup> Respirable fraction, 5 mg/m <sup>3</sup>	PNOC Total dust, 10 mg/m <sup>3</sup> Respirable fraction, 3 mg/m <sup>3</sup>	PNOC Total dust, 4 mg/m <sup>3</sup> Respirable fraction, 1.5 mg/m <sup>3</sup>
Sericite	PNOC Total dust, 15 mg/m <sup>3</sup> Respirable fraction, 5 mg/m <sup>3</sup>	PNOC Total dust, 10 mg/m <sup>3</sup> Respirable fraction, 3 mg/m <sup>3</sup>	PNOC Total dust, 4 mg/m <sup>3</sup> Respirable fraction, 1.5 mg/m <sup>3</sup>
Silicone oil	NR***	NR	NR

\*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.

Hazard symbols: WHMIS (Canadian workplace hazardous materials identification system)

None

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### Section 3. Composition/information on ingredients

Name/Compound	Weight %	CAS #
Sodium bicarbonate sodium hydrogen carbonate	>92	144-55-8
Fullers Earth Magnesium aluminum silicate	<5	8031-18-3
Sericite potassium aluminum silicate	<2.5	12001-26-2
Silicone oil Methyl hydrogen polysiloxane	<0.5	63148-57-2

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### Section 4. First Aid Measures

**Eye Exposure:** Irrigate eyes with water and repeat until pain free. Seek medical attention if irritation develops, or if vision changes occur.

**Skin Exposure:** In case of contact, wash with plenty of soap and water. Seek medical attention if irritation develops.

**Inhalation:** If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if irritation persists.

**Ingestion:** If victim is conscious and alert, give 2-3 glasses of water to drink and do not induce vomiting. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

Medical conditions possibly aggravated by exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema, or bronchitis. Skin contact may aggravate existing skin disease. Chronic overexposure may cause pneumoconiosis (“dusty lung” disease).

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### Section 5. Fire fighting measures

Extinguishing media: non combustible and non flammable – product is an extinguishing agent.

Unusual fire/explosion hazards: in a fire this material may decompose, releasing carbon monoxide and carbon dioxide (see Section 10).

Insensitive to mechanical impact or static discharge.

HMIS Hazard Ranking:

health = 1, flammability = 0, reactivity = 0, personal protective equipment: eye protection, respiratory protection under extended conditions (see Section 8).

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### Section 6. Accidental release measures

Clean up released material using vacuum or wet sweep and shovel to minimize generation of dust. Wear appropriate respiratory protection. Bag and drum for disposal. If product is used and/or contaminated, use PPE and containment appropriate to the nature of the mixture. Prevent material from entering waterways.

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### Section 7. Handling and storage

Avoid skin, eye, or respiratory exposure. Use appropriate PPE when handling or maintaining equipment, and wash thoroughly after handling (see Section 8). Keep product in original container or extinguisher. Contents may be under pressure – inspect for extinguisher rust periodically to insure container integrity. Do not mix with other extinguishing agents.

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## Section 8. Exposure controls/ personal protection

During the application of this product against fires, exhaust gases and the products of incomplete combustion (PICs) are the principal respiratory hazards. In the manufacture of extinguishers, automated systems and point source ventilation controls sufficiently minimize respiratory exposure. Employers and employees must use their collective judgment in determining occupational settings where the use of a dust mask or air purifying respirator is prudent. The need for respiratory protection is not likely for short-term use in well ventilated areas.

Respiratory protection: use N95 dust mask for limited exposure, use air-purifying respirator (APR) with high efficiency particulate air (HEPA) filters for prolonged exposure.

Eye protection: wear chemical goggles or full-face APR.

Skin protection: Coveralls and gloves will minimize skin exposure. Good personal hygiene practices essential, such as avoiding food, tobacco products, or other hand-to-mouth contact when handling. Wash thoroughly after handling.

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## Section 9. Physical and chemical properties

Appearance: white powder, finely divided odorless solid.

Specific gravity: ~ 0.9 in aerated condition

Solubility: product is coated - not immediately soluble in water

Non -flammable

Flash point: none

Vapor pressure: none

pH: approximately 8.3 – 9 for 1% solution

Boiling point: not applicable

No explosive or oxidizing properties

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## Section 10. Stability and reactivity

Stability: stable

Incompatibles: reacts with strong acids to form carbon dioxide, creating a possible asphyxiation hazard, dangerous reaction may occur in contact with mono-ammonium phosphate or sodium potassium alloys.

Decomposition products: heat of fire may release carbon monoxide, carbon dioxide.

Possibility of hazardous reactions: none

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## Section 11. Toxicological information

Acute toxicity: Sodium bicarbonate, oral LD<sub>50</sub> (rat): 4220 mg/kg body weight, oral TDLo (infant): 1260 mg/kg body weight, symptoms including pulmonary and kidney damage.  
Target organs in man: respiratory system, eyes. This product is a respiratory and eye irritant. No information was found indicating the product causes sensitization.

Chronic toxicity: Pneumoconiosis, or "dusty lung" disease, may result from chronic exposure to any dust.

Reproductive toxicity: Intraperitoneal TDLo (mouse) 40 mg/kg body weight, teratogen. The reproductive system was not found to be a target organ in humans.

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## Section 12. Ecological information

Ecotoxicity: No negative effects known.

Persistence/  
Degradability: degrades rapidly in humid/wet environment

Bioaccumulation: little, extent unknown

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### Section 13. Disposal considerations

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.

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### Section 14. Transportation information

This product is not a hazardous material under U.S. Department of Transportation (DOT) 49 CFR 172, and is not regulated by the DOT. This product is not classified as a hazardous material by Transport Canada's Transportation of Dangerous Goods regulations.

When 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 Limited Quantity when pressurized to less than 241 psig and when shipped via highway or rail. Use a Non-Flammable Gas label (class 2.2) when shipping via air.

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### Section 15. Regulatory information

International Inventory Status:

Sodium bicarbonate 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

European Risk and Safety phrases:

EU Classification:	Harmful.	
R Phrases:	22	Harmful if swallowed.
	36/37	Irritating to eyes and respiratory system.
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:

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).

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: None  
**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.

## Section 16. Shipping information

When 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 2.2 Non-Flammable Gas. Packing Group – N/A

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## Section 17. Other information

This MSDS 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.

The information herein is given in good faith but no warranty, expressed or implied, is made. Updated by Lindsay R. Hill, CIH