

Regular Dry Chemical (Fire Extinguishing Agent - Pressurized and Non-pressurized)

1. IDENTIFICATION

Product Name Regular Dry Chemical (Fire Extinguishing Agent –

Pressurized and Non-pressurized) BC, SDC, Sodium Bicarbonate

Other Names
Recommended use of the chemical and

restrictions on use

Identified uses Fire Extinguishing Agent

Restrictions on use Consult applicable fire protection codes

Company Identification Kidde Residential & Commercial 1016 Corporate Park Drive

Mebane, NC 27302

USA

Customer Information Number (919) 563-5911 (919) 304-8200

Emergency Telephone Number

CHEMTREC Number (800) 424-9300

(703) 527-3887 (International)

Issue Date February 10, 2017 **Supersedes Date** October 1, 2015

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)

2. HAZARD IDENTIFICATION

This SDS covers the product listed above as sold in pressurized and non-pressurized containers. GHS classifications for both forms are listed below.

GHS Classification – Pressurized

Hazard Classification

Gas under pressure - Compressed gas

Label Elements

Hazard Symbols



Signal Word: Warning

Hazard Statements

Contents under pressure; may explode if heated.

Precautionary Statements

Prevention

None

Response

None

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2. HAZARD IDENTIFICATION

Storage

Protect from sunlight. Store in well-ventilated place.

Disposal

None

GHS Classification: Non - pressurized

Hazard Classification

This product is classified as not hazardous in accordance with the Globally Harmonized System of Classification and Labelling (GHS).

Label Elements

Hazard Symbols

None

Signal Word: None

Hazard Statements

None

Precautionary Statements

Prevention

None

Response

None

Storage

None

Disposal

None

Other Hazards

Calcium carbonate and mica may contain small quantities of quartz (crystalline silica) as an impurity. 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.

Specific Concentration Limits

The values listed below represent the percentages of ingredients of unknown toxicity.

Acute oral toxicity < 10%
Acute dermal toxicity < 10%
Acute inhalation toxicity < 10%
Acute aquatic toxicity < 10%

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: BC, SDC, Sodium Bicarbonate

This product is a mixture.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	Concentration
Sodium Bicarbonate	144-55-8	88 - 92%
Calcium Carbonate	471-34-1	4 - 8%
Mica	12001-26-2	1 - 5%
Clay	1332-58-7	< 2%
Amorphous Silica	7631-86-9	< 2%

Note: Pressurized product uses nitrogen, carbon dioxide or compressed air as the expellant.

4. FIRST- AID MEASURES

Description of necessary first-aid measures

Eyes

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin

Wash skin thoroughly with soap and water. Obtain medical attention if irritation persists.

Ingestion

Dilute by drinking large quantities of water and obtain medical attention.

Inhalation

Move victim to fresh air. Obtain medical attention immediately for any breathing difficulty.

Most important symptoms/effects, acute and delayed

Aside from the information found under Description of necessary first aid measures (above) and Indication of immediate medical attention and special treatment needed, no additional symptoms and effects are anticipated.

Indication of immediate medical attention and special treatment needed Notes to Physicians

Treat symptomatically.

5. FIRE - FIGHTING MEASURES

Suitable Extinguishing Media

This preparation is used as an extinguishing agent and therefore is not a problem when trying to control a blaze. Use extinguishing agent appropriate to other materials involved. Keep pressurized extinguishers and surroundings cool with water spray as they may rupture or burst in the heat of a fire

Specific hazards arising from the chemical

Pressurized containers may explode in heat of fire.

Special Protective Actions for Fire-Fighters

Wear full protective clothing and self-contained breathing apparatus as appropriate for specific fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing. Prevent skin and eye contact. Remove leaking cylinder to a safe place. Ventilate the area.

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6. ACCIDENTAL RELEASE MEASURES

Environmental Precautions

Prevent large quantities of the material from entering drains or watercourses.

Methods and materials for containment and cleaning up

Sweep up or vacuum and transfer into suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Wear appropriate protective clothing. Prevent skin and eye contact.

Conditions for safe storage

Pressurized extinguishers should be properly stored and secured to prevent falling or being knocked over. Do not drag, slide or roll extinguishers. Do not drop extinguishers or permit them to strike against each other. Never apply flame or localized heat directly to any part of the extinguisher or plastic container. Store pressurized extinguishers and plastic containers away from high heat sources. Storage area should be: - cool - dry - well ventilated - under cover - out of direct sunlight

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist.

Mica

ACGIH TLV: 3 mg/m³ TWA, measured as respirable fraction of the aerosol.

OSHA PEL: 20 mppcf, <1% crystalline silica

Calcium Carbonate

OSHA PEL: 15 mg/m³ TWA, total dust

5 mg/m³ TWA, respirable fraction

Clay as Kaolin, Respirable Fraction

ACGIH TLV: 2 mg/m3 TWA

OSHA PEL: 15 mg/m3 TWA, total dust

5 mg/m³ TWA, respirable fraction

Nuisance Dust Limit

OSHA PEL: 50 mppcf or 15 mg/m3 TWA, total dust

15 mppcf or 5 mg/m³ TWA, respirable fraction

Appropriate engineering controls

Use with adequate ventilation. If this product is used in a pressurized system, there should be local procedures for the selection, training, inspection and maintenance of this equipment. When used in large volumes, use local exhaust ventilation.

Individual protection measures

Respiratory Protection

Not normally required. Use dust mask where dustiness is prevalent, or TLV is exceeded. In oxygen deficient atmospheres, use a self-contained breathing apparatus, as an air purifying respirator will not provide protection.

Skin Protection

Not normally needed when used as a portable fire extinguisher. Use gloves if irritation occurs.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye/Face Protection

Chemical goggles or safety glasses with side shields.

Body Protection

Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Non- Pressurized

Appearance

Odor

Physical State Solid (powder)

Color White Odorless

Odor Threshold No data available pH Not applicable

Specific Gravity Ca. 2.2

Boiling Range/Point (°C/F)

Melting Point (°C/F)

Flash Point (PMCC) (°C/F)

Vapor Pressure

Evaporation Rate (BuAc=1)

Not applicable

No data available

No data available

Evaporation Rate (BuAc=1) No data available
Solubility in Water 16.4g/100g
Vapor Density (Air = 1) No data available

VOC (g/l) None None

Partition coefficient (n- No data available

octanol/water)

Viscosity

Auto-ignition Temperature
Decomposition Temperature
Upper explosive limit
Lower explosive limit
Flammability (solid, gas)

No data available
No data available
No data available
No data available

Expellant Appearance

Physical State Compressed gas

Color Colorless None

Odor None No data available

pH Not applicable

Specific Gravity 0.075 lb/ft³ @70°F as vapor (Nitrogen) 0.1144 lb/ft³ (Carbon dioxide gas density)

Boiling Range/Point (°C/F) -196°C/-321°F(Nitrogen)

-78.5 °C /-109.3°F(Carbon Dioxide)

Melting Point (°C/F)

Flash Point (PMCC) (°C/F)

No data available

Not flammable

Vapor Pressure 838 psig @70°F and 1 atmosphere(Carbon Dioxide)

Evaporation Rate (BuAc=1) No data available
Solubility in Water No data available
Vapor Density (Air = 1) Not applicable

VOC (g/l) None

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9. PHYSICAL AND CHEMICAL PROPERTIES

VOC (%) None

Partition coefficient (n- No data available

octanol/water)

Viscosity

Auto-ignition Temperature

Decomposition Temperature
Upper explosive limit
Lower explosive limit
Flammability (solid, gas)

Not applicable
No data available
Not explosive
Not explosive
Not flammable

10. STABILITY AND REACTIVITY

Reactivity

Pressurized containers may rupture or explode if exposed to heat.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous polymerization will not occur.

Conditions to Avoid

Exposure to direct sunlight - contact with incompatible materials

Incompatible Materials

Strong oxidizing agents - strong acids

Hazardous Decomposition Products

Oxides of carbon

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Sodium Bicarbonate:

Oral LD50 (Rat) >4000 mg/kg Inhalation LC50(rat) >4.74 mg/l

Calcium Carbonate:

Oral LD50 (Rat) >2000 mg/kg

Dermal LD50 (Rabbit) >2000mg/kg

Inhalation LC50(rat) >3.0mg/l

Mica:

Oral LD50 (Rat) >2000 mg/kg

Amorphous Silica:

Oral LD50 (Rat) >5000 mg/kg

Dermal LD50 (Rabbit) >2000mg/kg

Clav:

Oral LD50 (Rat) >5000 mg/kg

Dermal LD50 (Rabbit) >5000mg/kg

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11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Nitrogen

Simple asphyxiant

Carbon Dioxide

Simple asphyxiant

LCLo (inhalation in humans): 90,000ppm/5 minutes.

Specific Target Organ Toxicity (STOT) - single exposure

<u>Sodium Bicarbonate:</u> Available data indicates this component is not expected to cause target organ effects after a single exposure.

<u>Calcium Carbonate:</u> Available data indicates this component is not expected to cause target organ effects after a single exposure.

<u>Nitrogen:</u> Exposure to nitrogen gas at high concentrations can cause suffocation by reducing oxygen available for breathing. Breathing very high concentrations can cause dizziness, shortness of breath, unconsciousness or asphyxiation.

Specific Target Organ Toxicity (STOT) - repeat exposure

<u>Sodium Bicarbonate:</u> Available data indicates this component is not expected to cause target organ effects after repeat exposure.

<u>Calcium Carbonate:</u> Available data indicates this component is not expected to cause target organ effects after repeat exposure.

Serious Eye damage/Irritation

<u>Sodium Bicarbonate:</u> Slightly irritating (rabbit) <u>Calcium Carbonate:</u> Not irritating (rabbit)

Mica: Not irritating (rabbit)

Skin Corrosion/Irritation

<u>Sodium Bicarbonate:</u> Slightly irritating (rabbit) <u>Calcium Carbonate:</u> Not irritating (rabbit)

Mica: Not irritating (rabbit)

Respiratory or Skin Sensitization

Calcium Carbonate: Non-sensitizing to skin in Mouse local lymph node assay.

Carcinogenicity

Calcium carbonate and mica may contain small quantities of quartz (crystalline silica) as an impurity. 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 has classified Silica Dust, Crystalline, in the form of quartz or cristobalite as 1 (carcinogenic to humans).

Germ Cell Mutagenicity

Sodium Bicarbonate: Negative test results in animal studies.

<u>Calcium Carbonate</u>: Negative results in the Mammalian Cell Gene Mutation Assay with and without metabolic activation, Ames test, and In vitro Mammalian Chromosome Aberration Test.

Reproductive Toxicity

<u>Sodium Bicarbonate:</u> Available data indicates this component is not expected to cause reproductive toxicity or birth defects.

<u>Calcium Carbonate:</u> Available data indicates this component is not expected to cause reproductive toxicity or birth defects.

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11. TOXICOLOGICAL INFORMATION

Aspiration Hazard

Not an aspiration hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Sodium Bicarbonate:

LC50 Lepomis macrochirus 7100 mg/l 96h EC50 Daphnia magna 4100 mg/l 48h

Mobility in soil

Nitrogen occurs naturally in the atmosphere

Persistence/Degradability

Nitrogen occurs naturally in the atmosphere.

Bioaccumulative Potential

Nitrogen occurs naturally in the atmosphere.

Other adverse effects

No relevant studies identified.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of container in accordance with all applicable local and national regulations. Do not cut, puncture or weld on or near to the container. If spilled, nitrogen will vaporize to the atmosphere.

14. TRANSPORT INFORMATION

Safety Data Sheet information is intended to address a specific material and not various forms or states of containment.

Special Precautions for Shipping:

Individuals must be certified as Hazardous Material Shipper for all transportation modes. Pressurized Fire Extinguishers are considered a hazardous material by the US Department of Transportation and Transport Canada.

DOT CFR 172.101 Data

Fire extinguishers, 2.2, UN1044

UN Proper Shipping Name

Fire extinguishers (2.2)

UN Class
UN Number

UN1044

UN Packaging Group

Not applicable

Classification for AIR
Transportation (IATA)

Consult current IATA Regulations prior to shipping by air.

Transportation (IATA)
Classification for Water

Consult current IMDG Regulations prior to shipping by water.

Transport IMDG

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14. TRANSPORT INFORMATION

When shipping via ground, portable fire extinguishers pressurized to less than 241 psi and of less than 1100 cubic inches in size meet the requirements of "Limited Quantity" as referenced in 49 CFR 173.309 (2010). There is no limited quantity designation for fire extinguishers when shipped by air or water.

This section is believed to be accurate at the time of preparation. It is not intended to be a complete statement or summary of the applicable laws, rules, or hazardous material regulations, and is subject to change. Users have the responsibility to confirm compliance with all laws, rules, and hazardous material regulations in effect at the time of shipping.

15. REGULATORY INFORMATION

United States TSCA Inventory

This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Substance Inventory.

Canada DSL Inventory

All ingredients in this product are listed on the Domestic Substance List (DSL) or the Non-Domestic Substance List (NDSL) or are exempt from listing.

SARA Title III Sect. 311/312 Categorization: Pressurized w/ Nitrogen

Gas under pressure

SARA Title III Sect. 311/312 Categorization: Non-pressurized

None

SARA Title III Sect. 313

This product does not contain any chemicals that are listed in Section 313 at or above de minimis concentrations.

16. OTHER INFORMATION

NFPA Ratings

NFPA Code for Health - 1

NFPA Code for Flammability - 0

NFPA Code for Reactivity - 0

NFPA Code for Special Hazards - None

HMIS Ratings

HMIS Code for Health - 1

HMIS Code for Flammability - 0

HMIS Code for Physical Hazard - 0

HMIS Code for Personal Protection - See Section 8

*Chronic

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16. OTHER INFORMATION

Legend

ACGIH: American Conference of Governmental Industrial Hygienists

CAS#: Chemical Abstracts Service Number

EC50: Effect Concentration 50%

IARC: International Agency for Research on Cancer

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

N/A: Denotes no applicable information found or available OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit TLV: Threshold Limit Value

TSCA: Toxic Substance Control Act

Revision Date: February 10, 2017

Replaces: October 1, 2015

Changes made: Update to Section 3 and 15.

Information Source and References

This SDS is prepared by Hazard Communication Specialists based on information provided by internal company references.

Prepared By: EnviroNet LLC.

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