

**IDENTIFICATION** 

1.

# SAFETY DATA SHEET Regular Dry Chemical (Fire Extinguishing Agent - Pressurized and Non-pressurized)

Product Name	Regular Dry Chemical (Fire Extinguishing Agent – Pressurized and Non-pressurized)
Other Names	BC, SDC, Sodium Bicarbonate
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	April 10, 2015
Supersedes Date	February 9, 2015
Safety Data Sheet prepared in accordance with OSHA	's Hazard Communication Standard (29 CFR 1910.1200)and the Globally

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.



# 2. HAZARD IDENTIFICATION

Precautionary Statements
Prevention
None
Response
None
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.

Component	CAS Number	Concentration
Sodium Bicarbonate	144-55-8	75 - 85%
Calcium Carbonate	471-34-1	10 - 20%
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.

#### **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/m<sup>3</sup> TWA, measured as respirable fraction of the aerosol. OSHA PEL: 20 mppcf, <1% crystalline silica **Calcium Carbonate** OSHA PEL: 15 mg/m<sup>3</sup> TWA, total dust 5 mg/m<sup>3</sup> TWA, respirable fraction **Clay as Kaolin, Respirable Fraction** ACGIH TLV: 2 mg/m<sup>3</sup> TWA OSHA PEL: 15 mg/m<sup>3</sup> TWA, total dust 5 mg/m<sup>3</sup> TWA, respirable fraction **Nuisance Dust Limit** OSHA PEL: 50 mppcf or 15 mg/m<sup>3</sup> TWA, total dust 15 mppcf or 5 mg/m<sup>3</sup> 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.



# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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. Eye/Face Protection Chemical goggles or safety glasses with side shields. Body Protection Normal work wear.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Non- Pressurized Appearance **Physical State** Solid (powder) White Color Odorless Odor **Odor Threshold** No data available pН Not applicable Ca. 2.2 **Specific Gravity** Boiling Range/Point (°C/F) Not applicable Melting Point (°C/F) No data available Flash Point (PMCC) (°C/F) Not flammable Vapor Pressure No data available Evaporation Rate (BuAc=1) No data available Solubility in Water 16.4g/100g Vapor Density (Air = 1) Not applicable None VOC (g/l) **VOC (%)** None Partition coefficient (n-No data available octanol/water) No data available Viscosity Auto-ignition Temperature No data available **Decomposition Temperature** No data available Upper explosive limit No data available Lower explosive limit No data available Flammability (solid, gas) No data available Expellant Appearance **Physical State** Compressed gas Colorless Color Odor None No data available **Odor Threshold** Not applicable pН 0.075 lb/ft3 @70°F as vapor (Nitrogen) **Specific Gravity** 0.1144 lb/ft<sup>3</sup> (Carbon dioxide gas density)



# 9. PHYSICAL AND CHEMICAL PROPERTIES

Melting Point (°C/F) Flash Point (PMCC) (°C/F) Vapor Pressure Evaporation Rate (BuAc=1) Solubility in Water Vapor Density (Air = 1) VOC (g/l) **VOC (%)** Partition coefficient (noctanol/water) Viscosity **Auto-ignition Temperature Decomposition Temperature** Upper explosive limit Lower explosive limit Flammability (solid, gas)

-196°C/-321 °F(Nitrogen) -78.5 °C /-109.3°F(Carbon Dioxide) No data available Not flammable 838 psig @70°F and 1 atmosphere(Carbon Dioxide) No data available No data available Not applicable None None No data available Not applicable No data available 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



# 11. TOXICOLOGICAL INFORMATION

Mica:

Oral LD50 (Rat) >2000 mg/kg <u>Amorphous Silica:</u> Oral LD50 (Rat) >5000 mg/kg Dermal LD50 (Rabbit) >2000mg/kg <u>Clay</u>: Oral LD50 (Rat) >5000 mg/kg Dermal LD50 (Rat) >5000mg/kg <u>Nitrogen</u> Simple asphyxiant <u>Carbon Dioxide</u> 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) <u>Mica</u>: Not irritating (rabbit)

# **Skin Corrosion/Irritation**

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

<u>Sodium Bicarbonate:</u> 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.



# 11. TOXICOLOGICAL INFORMATION

# **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.

# Aspiration Hazard

Not an aspiration hazard.

# 12. ECOLOGICAL INFORMATION

# Ecotoxicity

<u>Sodium Bicarbonate:</u> 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. Specific volumes, pressures or hardware configurations containing such materials can dictate various different hazard classifications for transportation and labelling requirements. Under Federal Regulations only trained and qualified individuals are permitted to label and ship products following the applicable Department of Transportation (DOT), Federal Aviation Administration (FAA), Transport Canada (TC), International Maritime Dangerous Goods (IMDG) or International Air Transport Association (IATA) requirements.

# 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.



# 15. REGULATORY INFORMATION

## 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 Pressure hazard 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

# 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: April 10, 2015 Replaces: February 9, 2015 Changes made: Updated to GHS Classification.

# Information Source and References

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



# 16. OTHER INFORMATION

# Prepared By:

EnviroNet LLC.

The information and recommendations presented in this SDS are based on sources believed to be accurate. Kidde Residential & Commercial assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the material for their particular purposes. In particular, we make NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should ensure that any use or disposal of the material is in accordance with applicable Federal, State, and local laws and regulations.