SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name STEEL FIRE ® SODIUM BICARBONATE BASE (BC) DRY CHEMICAL MODEL 754 (Part No. SF-SB)

Other means of identification

Synonyms Sodium Bicarbonate, SDC

Recommended use of the chemical and restrictions on use

Recommended Use Fire Suppression

Uses advised against Not for human or animal drug use

Details of the Supplier of the Safety Data Sheet

Extinguisher Manufacturer STRIKE FIRST CORPORATION
777 Tapscott Rd. Toronto Ontario
M1X 1A2

Contact Information Phone: (416) 299-7767
Fax: (416) 299-8039
Email: info@strike-first.com

Chemical Supplier Name STEEL FIRE EQUIPMENT LTD.

Supplier Address 150 SUPERIOR BLVD. MISSISAUGA ON L52 2L2 CANADA

Supplier Contact Numbers Phone: (905) 564-1500
Fax: (905) 564-0008
Email: sales@steelfire.com

Emergency Telephone Number CHEMTREC 1-800-424-9300 or
(703) 527-3887

2. HAZARDS IDENTIFICATION

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

Classification
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**GHS Label elements, including precautionary statements**

**Hazard Symbol**

[Signal Word: Warning]

**Hazard Statements**

Contents under pressure; may explode if heated

**Emergency Overview**

The product contains no substances which at their concentration, are considered to be hazardous to health.

<table>
<thead>
<tr>
<th>Appearance</th>
<th>White</th>
<th>Physical State</th>
<th>Powder(s) Solid</th>
<th>Odor</th>
<th>Odorless</th>
</tr>
</thead>
</table>

Precautionary Statements - Prevention
None

Precautionary Statements - Response
None

Precautionary Statements - Storage
None

Precautionary Statements - Disposal
None

**Hazards not otherwise classified (HNOC)**

Not applicable

**Unknown Toxicity**

2.08% of the mixture consists of ingredient(s) of unknown toxicity

**Other information**

Maybe harmful if swallowed
Harmful to aquatic life with long lasting effects
May cause slight eye irritation

**Interactions with Other Chemicals**

No information available.
3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms
SODIUM BICARBONATE, SDC

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight - %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fullers Earth</td>
<td>8031-18-3</td>
<td>1 – 5</td>
<td>*</td>
</tr>
<tr>
<td>Mica</td>
<td>12001-26-2</td>
<td>1 – 5</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret

4. FIRST AID MEASURES

First aid measures
Eye contact
Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.

Skin contact
Wash with soap and water.

Inhalation
Remove to fresh air. If symptoms persist, call a physician.

Ingestion
Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Most Important Symptoms and Effects
Possibly a mild irritant to the respiratory system and eyes; mild irritant to the skin. Symptoms may include coughing, shortness of breath, and irritation of the lungs, eyes, and skin. Ingestion may cause gastrointestinal irritation and edema.

Indication of any immediate medical attention and special treatment if needed

Notes to Physician
Treat symptomatically

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
No information available.

Uniform Fire Code
COMBUSTIBLE DUST/POWDER

Hazardous Combustion Products
Carbon oxides.

Explosion Data
Sensitivity to Mechanical Impact  No.
Sensitivity to Static Discharge  No.

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHS/NIOSH (approved p or equivalent) and full protective gear.

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### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**  Avoid contact with skin, eyes or clothing.

**Environmental precautions**

**Environmental precautions**  Refer to protective measures listed in Sections 7 & 8.

**Methods and material for containment and cleaning up**

**Methods for containment**  Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**  Avoid generation of dust. Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust. Pick up and transfer to properly labeled containers. After cleaning flush away traces of water.

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### 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Handling**  Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, or clothing. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

**Storage**  Keep container tightly closed. Keep/store only in original container.

**Incompatible Products**  Strong oxidizing agents. Strong acids.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters**

**Exposure Guidelines**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mica 12001-26-2</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 20mppcf (&lt;1% crystalline silica) 3 mg/m³ (vacated)</td>
<td>IDLH: 1500mg/m³ containing &lt;1% quartz TWA: 3 mg/m³ respirable dust</td>
</tr>
</tbody>
</table>
ACGIH TLV: American Conference of Government Industrial Hygienist – Threshold Limit Value
OSHA PEL: Occupational Safety and Health Administration – Permissible Exposure Limits
NIOSH IDLH Immediately Dangerous to Life or Health

Appropriate engineering controls

Engineering measures
Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shield (or goggles).

Skin and body protection
Wear protective gloves and protective clothing.

Respiratory protection
No protective equipment is needed under normal conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. Effective dust mask.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Powder (s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>White</td>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
<td>Odor Threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>Property</td>
<td>Values</td>
<td>Remarks</td>
<td>Method</td>
</tr>
<tr>
<td>Ph</td>
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<td>Melting / Freezing point</td>
<td>Approx. 50 °C</td>
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<td>Boiling point /boiling range</td>
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<td>None known</td>
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</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td>None known</td>
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</tr>
<tr>
<td>Flammability (solid, gas)</td>
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<td>None known</td>
<td></td>
</tr>
<tr>
<td>Flammability limit in air</td>
<td>Upper flammability limit</td>
<td>Not flammable</td>
<td>None known</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>Not Flammable</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Low Est 3.73e-09mmHg</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
<td>None known</td>
<td></td>
</tr>
<tr>
<td>Specific gravity</td>
<td>Approx. 2.2</td>
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</tr>
<tr>
<td>Water solubility</td>
<td>Not immediately soluble in water</td>
<td>None known</td>
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<tr>
<td>Solubility in other solvents</td>
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<td>None known</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>0</td>
<td>None known</td>
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<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td>None known</td>
<td></td>
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</tbody>
</table>
Steel Fire – BC Powder Model 754

10. STABILITY AND REACTIVITY

Reactivity

Reacts exothermically with acids to generate non-toxic carbon dioxide gas.
Dangerous reaction with mono-ammonium phosphate
and sodium potassium alloys

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous Polymerization
Hazardous polymerization does not occur.

Conditions to avoid
Incompatible materials.

Incompatible materials
Strong oxidizing agents. Strong acids.

Hazardous Decomposition Products

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation
May cause irritation of respiratory tract.

Eye contact
Contact with eyes may cause irritation.

Skin contact
May cause irritation.

Ingestion
Specific test data for the substance or mixture is not available

Component Information

Information on toxicological effects

Symptoms
No information available
Delayed and immediate effects as well as chronic effects from short and long term exposure

Sensitization  
No information available.

Mutagenic Effects  
No information available.

Carcinogenicity  
Contains no ingredient listed as carcinogen.

Reproductive toxicity  
No information available.

STOT – single exposure  
No information available.

STOT – repeated exposure  
No information available.

  Chronic Toxicity  
No known effect based on information supplied.

  Target Organ Effects  
None known.

Aspiration Hazard  
No information available.

Numerical measures of toxicity  Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)

3,282.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity  
Harmful to aquatic life with long lasting effect

Persistence Degradability  
Soluble in water, NaHCO3: 96g/l @20 °C.

Bioaccumulation  
No information available

Other adverse effects  
No information available

13. DISPOSAL INFORMATION

Waste treatment methods

Disposal methods  
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261. To determine whether the altered material is a
hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging Dispose of contents/containers in accordance with local regulations.

### 14. TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>DOT</th>
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</thead>
<tbody>
<tr>
<td>Proper Shipping Name</td>
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<tr>
<td>Hazard Class</td>
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<tr>
<td>TDG</td>
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</tr>
<tr>
<td>MEX</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>ICAO</td>
<td>Not Regulated</td>
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<tr>
<td>IATA</td>
<td>Not Regulated</td>
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<tr>
<td>Proper Shipping Name</td>
<td>NON REGULATED</td>
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<td>Hazard Class</td>
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<td>Hazard Class</td>
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<td>IRD</td>
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<tr>
<td>ADR</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>ADN</td>
<td>Not Regulated</td>
</tr>
</tbody>
</table>

**NOTES:**
This product is not defined as a hazardous material under U.S. Department of Transportation (DOT) 49 CFR 172, or by Transport Canada “Transportation of Dangerous Goods” regulations.

Special Precautions for Shipping:
If shipped in a stored pressure-type fire extinguisher, and pressurized with a non-flammable, nontoxic 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 is Limited Quantity when shipped via highway or rail. Use a Non-Flammable Gas label (class 2.2) when shipping via air.

### 15. REGULATORY INFORMATION

**International Inventories**

| TSCA | Complies |
| DSL | All components are listed either on the DSL or NDSL. |

**TSCA** – United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** – Canadian Domestic Substances List/Non-Domestic Substances List

**US Federal Regulations**
SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of Federal Regulations, Part 372.

SARA 313/312 Hazard Categories
- **Acute Hazard**: No
- **Chronic Health Hazard**: No
- **Fire Hazard**: No
- **Sudden Release Hazard**: Yes
- **Reactive Hazard**: No

* Only applicable if material is in a pressurized extinguisher.

**CWA (Clean Water Act)**
This product does not contain any substances regulated as pollutants pursuant to Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substance under the Comprehensive Environmental Response and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional or state level pertaining to release of this material.

**US State Regulations**

**California Proposition 65**
This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
<th>Rhode Island</th>
<th>Illinois</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mica 12001-26-2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**International Regulations**

**Mexico**
**National occupational exposure limits**

<table>
<thead>
<tr>
<th>Component</th>
<th>Carcinogen Status</th>
<th>Exposure Limits</th>
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</thead>
<tbody>
<tr>
<td>Mica 12001-26-2 (1 – 5)</td>
<td></td>
<td>Mexico: TWA=3 mg/m³</td>
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</table>

Mexico – Occupational Exposure Limits - Carcinogens

**Canada**
**WHMIS Hazard Class**
Not Determined
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Hazards – Personal Protection</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>0</td>
<td></td>
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<tr>
<td>HMIS</td>
<td>Health Hazards</td>
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<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flammability</td>
<td>Instability</td>
<td></td>
</tr>
</tbody>
</table>

Prepared By: Strike First Corporation
777 Tapscott Road
Scarborough ON
M1X 1A2 Canada

Revision Date: January 15, 2018
Revision Note: Updated to SDS Format

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of this publication. This information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the test.

END OF SAFETY DATA SHEET