1. IDENTIFICATION

Product identifier
Product Name
Fireplace & Stove Repair – Sodium Silicate Based – Textured Black/Charcoal - Cartridge

Other means of identification
SDS #
RD-0026

Product Code
0466 Series

Recommended use of the chemical and restrictions on use
Recommended Use
A tough silicate cement that sets hard when fired. The black textured paste designed for interior use, adheres to fire brick, cinder block, metal & mortar. Cures w/ a warm fire & provides a durable, long-lasting seal that withstands temperatures up to 1,000°F. Long-lasting seal that withstands temperatures up to 1,000°F.

Details of the supplier of the safety data sheet
Supplier Address
Red Devil, Inc.
4175 Webb Street
Pryor, Oklahoma 74361
www.reddevil.com

Emergency telephone number
Company Phone Number
918-825-5744
Fax: 918-825-5761

Emergency Telephone
INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance
Black/Dark Charcoal Gray

Physical state
Textured paste

Odor
Mild to no Odor

Classification
Skin corrosion/irritation
Category 2

Serious eye damage/eye irritation
Category 2

Signal Word
Warning

Hazard statements
Causes skin irritation
Causes serious eye irritation
Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves
Wear eye/face protection

Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Silicate</td>
<td>1344-09-8</td>
<td>45-55</td>
</tr>
<tr>
<td>CAS #68953-58-52 &amp; #68855-54-9; Silica and Clay Blend</td>
<td>Proprietary</td>
<td>40-50</td>
</tr>
<tr>
<td>Non-hazardous Ingredients*</td>
<td>Proprietary</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Silicate, as Perlite</td>
<td>Proprietary</td>
<td>&lt;2.5</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is “proprietary” and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

* Unlisted ingredients are not considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).
(Silica and Carbon black) Inhalation of particulates unlikely due to product’s physical state.

4. FIRST AID MEASURES

Description of first aid measures

General Advice
Provide this SDS to medical personnel for treatment.

Eye Contact
Immediately flush w/ large quantities of water for @ least 15 minutes until irritation subsides. Get medical attention. Eye irritation may be severe, if not immediately removed.

Skin Contact
Wash w/ soap & water for @ least 15 minutes. Get medical attention if symptoms persist. Remove & wash contaminated clothing.

Inhalation
Remove to fresh air. If breathing difficult, leave area to obtain fresh air. If breathing remains difficult, get medical attention. Inhalation unlikely, as product is a paste.

Ingestion
Ingestion highly unlikely. Do not induce vomiting unless directed by medical personnel. If vomiting occurs, lean patient forward to maintain an open airway & prevent aspiration. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms
Prolonged or repeated skin contact may result in dermatitis (red, dry skin). Exposed individuals may experience eye tearing, redness and discomfort. Irritating to mouth, throat, and stomach if ingested. May cause gastrointestinal irritation, nausea, diarrhea, and vomiting.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Medical Conditions Aggravated By Exposure: Dermatitis or other pre-existing skin
conditions may be aggravated by overexposure to this product. May cause serious skin and eye irritation.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**  
Carbon dioxide (CO2). Dry chemical. Water spray (fog). Foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**  
Not determined.

**Specific Hazards Arising from the Chemical**  
Product is not flammable.

**Hazardous combustion products**  
Carbon oxides.

**Protective equipment and precautions for firefighters**  
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to keep fire-exposed containers cool.

### 6. ACCIDENTAL RELEASE MEASURES

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

<table>
<thead>
<tr>
<th>Personal Precautions</th>
<th>Wear protective clothing as described in Section 8 of this safety data sheet.</th>
</tr>
</thead>
</table>
| Other Information    | Small Spills: 1 drum or less – Level D Equipment (gloves, chemical resistant apron, boots & eye protection).  
                      | Large Spills: Rubber gloves, rubber boots, face shield & Tyvek suit as a minimum. Minimum level of PPE for releases in which the oxygen level is < 19.5% or is unknown, should be Level B: triple gloves (rubber gloves & nitrile gloves over latex gloves), chemical resistant suit, fire-retardant clothing & boots, hard hat & self-contained breathing apparatus. |
| For Emergency Responders | Restrict access to spill area. |

**Environmental precautions**

**Environmental precautions**  
Minimize use of water to prevent environmental contamination. Prevent spill or rinse from contaminating storm drains, sewers, soil or groundwater. Do not allow discharge containing this material to enter streams, ponds, estuaries, oceans or other waters unless in accordance w/ requirements of National Pollutant Discharge Elimination System (NPDES) permit & permitting authority has been notified in writing prior to discharge. Do not allow discharge containing this material to enter sewer systems w/o previously notifying local sewage treatment plant authority. For information, contact State Water Board or EPA Regional Office  
Other: U.S. regulations may require reporting of spills of this material reaching surface waters if sheen is formed. See Section 12 for additional Ecological Information.

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

<table>
<thead>
<tr>
<th>Methods for Containment</th>
<th>Prevent further leakage or spillage if safe to do so. Use absorbent material to contain spill.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods for Clean-Up</td>
<td>Sweep up absorbed material and shovel into suitable containers for disposal. Wash area with soap and water. For waste disposal, see section 13 of the SDS.</td>
</tr>
</tbody>
</table>
7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Keep out of reach of children & pets. Do not take internally. Do not breathe vapors. Use only w/ adequate ventilation. Wash thoroughly after handling. Avoid contact w/ eyes, skin & clothing. Open windows & doors to ensure cross-ventilation & fresh air during application & curing. Do not eat or drink while handling this material. In event of spill – see Section 6.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Stable under normal conditions of handling, use & storage. Store containers in a cool, dry location, away from direct sunlight & high temperatures. Protect from freezing. Store away from incompatible materials. Close container after each use & keep tightly closed when not in use. To maximize shelf life, store @ temperatures below 26C (80F).

Incompatible Materials
Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
Exposure guidelines / protective equipment are for routine handling and accidental spills

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicate, as Perlite</td>
<td>-</td>
<td>(vacated) TWA: 15 mg/m$^3$ total dust (vacated) TWA: 5 mg/m$^3$ respirable fraction</td>
<td>TWA: 10 mg/m$^3$ total dust TWA: 5 mg/m$^3$ respirable dust</td>
</tr>
<tr>
<td>Carbon Black 1333-86-4</td>
<td>TWA: 3 mg/m$^3$ inhalable particulate matter</td>
<td>TWA: 3.5 mg/m$^3$ (vacated) TWA: 3.5 mg/m$^3$</td>
<td>IDLH: 1750 mg/m$^3$ TWA: 3.5 mg/m$^3$ TWA: 0.1 mg/m$^3$ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls
Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Use approved safety goggles or safety glasses. If necessary, refer to appropriate regulations and standards.

Skin and Body Protection
Skin: Wear chemical impervious gloves (eg: Nitrile or Neoprene). Use triple gloves for spill response. If necessary, refer to appropriate regulations & standards.

Body: Use protection appropriate for task (eg: lab coat, coveralls, Tyvek suit). If necessary, refer to OSHA Technical Manual (Sec. VII: Personal Protective Equipment) or appropriate Standards of Canada. Use foot protection, as described in appropriate regulations & standards.

Respiratory Protection
If mists or sprays are created, use appropriate respiratory protection. Oxygen levels below 19.5% considered IDLH by OSHA. In such instances, use full-facepiece pressure demand SCBA or a full facepiece, supplied air respirator w/ auxiliary self-contained air supply.

General Hygiene Considerations
Wash contaminated clothing before reuse.
9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Note: The information below is not intended for use in preparing product specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Textured paste</td>
</tr>
<tr>
<td>Appearance</td>
<td>Black/Dark Charcoal Gray</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild to no Odor</td>
</tr>
<tr>
<td>Color</td>
<td>Black/Dark Charcoal Gray</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>10-11.25</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>&lt;0°C / &lt;32°F</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>Not Established</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt;93.33°C / &gt;200°F</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>Unknown</td>
</tr>
<tr>
<td>Upper flammability or explosive limits</td>
<td></td>
</tr>
<tr>
<td>Lower flammability or explosive limits</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not established</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not established</td>
</tr>
<tr>
<td>Relative Density</td>
<td>~1.50-2.00</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>slightly soluble</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Unknown</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>Not determined</td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
</tr>
<tr>
<td>Other information</td>
<td></td>
</tr>
<tr>
<td>VOC Content</td>
<td>&lt;10 g/L</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

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. Excessive heat or cold.

Incompatible materials
Acids.

Hazardous decomposition products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye Contact  Causes serious eye irritation.

Skin Contact  Prolonged and frequent contact may cause redness and irritation. Repeated skin contact may cause dermatitis.

Inhalation  Unlikely, due to paste consistency.

Ingestion  May be harmful if swallowed; Ingestion can cause irritation of the upper digestive and respiratory tracts.

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Silicate 1344-09-8</td>
<td>= 1960 mg/kg (Rat)</td>
<td>&gt; 4640 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Non-hazardous Ingredients*</td>
<td>&gt; 90 mL/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Carbon Black 1333-86-4</td>
<td>&gt; 15400 mg/kg (Rat)</td>
<td>&gt; 3 g/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms  Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization  Not known to be human skin or respiratory sensizers.

Carcinogenicity  The table below indicates whether each agency has listed any ingredient as a carcinogen. Carbon black is a possible carcinogen when it appears as a respirable dust.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black 1333-86-4</td>
<td>A3</td>
<td>Group 2B</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 2B - Possibility Carcinogenic to Humans
Group 3 IARC components are "not classifiable as human carcinogens"
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Numerical measures of toxicity

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

Oral LD50  >2,000 mg/kg
Dermal LD50 >2,000 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

PRACTICES SHOULD BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION. Leaching of uncured product into waterways & lakes will be similar to sodium silicate.
### Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Silicate</td>
<td>1344-09-8</td>
<td>3185: 96 h <em>Brachydanio rerio</em> mg/L LC50 semi-static 301 - 478: 96 h <em>Lepomis macrochirus</em> mg/L LC50</td>
<td>216: 96 h <em>Daphnia magna</em> mg/L EC50</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td></td>
<td>5600: 24 h <em>Daphnia magna</em> mg/L EC50</td>
</tr>
</tbody>
</table>

**Persistence/Degradability**

Not tested for persistence & biodegradability.

**Bioaccumulation**

Not tested for bio-accumulation potential.

**Mobility**

Not tested for mobility in soil

**Other Adverse Effects**  
Environmental Exposure Controls: Should be maintained so as to prevent release to the environment (atmospheric release, release to waterways & spills)

### 13. DISPOSAL CONSIDERATIONS

**Waste Treatment Methods**

- **Disposal of Wastes**: Disposal should be in accordance with applicable regional, national and local laws and regulations.

- **Contaminated Packaging**: Disposal should be in accordance with applicable regional, national and local laws and regulations.

### 14. TRANSPORT INFORMATION

**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

Not regulated

**IATA**

Not regulated

**IMDG**

Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>TSCA</th>
<th>DSL/NDSL</th>
<th>EINECS/E LINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Silicate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CAS #68953-58-52 &amp; #68855-54-9; Silica and Clay Blend</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Non-hazardous Ingredients*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Silicate, as Perlite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Black</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

*Non-hazardous Ingredients* include materials that do not meet the criteria for hazardous waste, requiring specific labeling, handling, or disposal controls and may include non-hazardous materials that are added to the product to enhance its performance.
Legend:
- **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- **EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- **ENCS** - Japan Existing and New Chemical Substances
- **IECSC** - China Inventory of Existing Chemical Substances
- **KECL** - Korean Existing and Evaluated Chemical Substances
- **PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- **AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations**

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

**SARA 311/312 Hazard Categories**

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden Release of Pressure Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

**SARA 313**
Not determined

**CWA (Clean Water Act)**
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).

**US State Regulations**

**California Proposition 65**
This product contains the following Proposition 65 chemicals.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Black - 1333-86-4</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS #68953-58-52 &amp; #68855-54-9: Silica and Clay Blend</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Silicate, as Perlite</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Carbon Black 1333-86-4</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>0</td>
<td>0</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal Protection</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>0</td>
<td>0</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

Issue Date: 19-Aug-2013
Revision Date: 02-Apr-2019
Revision Note: SDS sections updated 2, 4, 9, 11

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The 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 text.

End of Safety Data Sheet