



Safety Data Sheet

Issue Date 19-Aug-2013

Revision Date: 25-Sep-2013

Version 1

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 to 1000°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 (24 hr) 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 1
Serious eye damage/eye irritation	Category 1

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage



Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
IF SWALLOWED: rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Sodium Silicate	1344-09-8	45-55
CAS #68953-58-52 & #68855-54-9; Silica and Clay Blend	Proprietary	40-50
Non-hazardous Ingredients*	Proprietary	<10
Silicate, as Perlite	Proprietary	<2.5
Carbon Black	1333-86-4	<0.05

* 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

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 damage 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

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.
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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 corrosive burns.
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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

Personal Precautions	Wear protective clothing as described in Section 8 of this safety data sheet.
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 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.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Use absorbent material to contain spill.
Methods for Clean-Up 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.

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). Store locked up.
Incompatible Materials Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Silicate, as Perlite	-	(vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
Carbon Black 1333-86-4	TWA: 3 mg/m ³ inhalable fraction	TWA: 3.5 mg/m ³ (vacated) TWA: 3.5 mg/m ³	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

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 & 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

<p>Physical State Appearance Color</p>	<p>Textured paste Black/Dark Charcoal Gray Black/Dark Charcoal Gray</p>	<p>Odor Odor Threshold</p>	<p>Mild to no Odor Not determined</p>
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<u>Property</u>	<u>Note: The information below is not intended for use in preparing product specifications</u>	<u>Remarks • Method</u>
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<p>pH Melting Point/Freezing Point Boiling Point/Boiling Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper Flammability Limits Lower Flammability Limit Vapor Pressure Vapor Density Specific Gravity Water Solubility Solubility in other solvents Partition Coefficient Autoignition Temperature Decomposition Temperature Kinematic Viscosity Dynamic Viscosity Explosive Properties Oxidizing Properties VOC Content (%) VOC Content</p>	<p>10.0-12.0 < 0 °C / <32 °F Not Established > 93.33 °C / > 200 °F Not determined Not determined Unknown Unknown Not established Not established ~1.50-2.00 Slightly soluble Not determined Not determined Unknown Not determined Not determined Not determined Not determined Not determined <1% <10 g/L</p>	<p>@ 25 °C (77 °F)</p>
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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

Product Information

- Eye Contact** Causes severe eye damage.
- Skin Contact** Causes severe skin burns; 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 causes burns of the upper digestive and respiratory tracts.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Silicate 1344-09-8	= 1153 mg/kg (Rat)	> 4640 mg/kg (Rabbit)	-
Carbon Black 1333-86-4	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-

Information on physical, chemical and toxicological effects

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 sensitizers.

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.

Chemical Name	ACGIH	IARC	NTP	OSHA
CAS #68953-58-52 & #68855-54-9; Silica and Clay Blend		Group 3		
Carbon Black 1333-86-4	A3	Group 2B		X

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 2B - Possibly 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

Target organ effects

Acute: Eyes & Skin. Chronic: Skin.

Numerical measures of toxicity

Not determined

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

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Sodium Silicate 1344-09-8		301 - 478: 96 h Lepomis macrochirus mg/L LC50 3185: 96 h Brachydanio rerio mg/L LC50 semi-static		216: 96 h Daphnia magna mg/L EC50
Carbon Black 1333-86-4				5600: 24 h Daphnia magna mg/L EC50

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

TSCA Listed
DSL Listed
NDSL Listed

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*

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

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

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.

Chemical Name	California Proposition 65
Carbon Black - 1333-86-4	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
CAS #68953-58-52 & #68855-54-9; Silica and Clay Blend			X
Silicate, as Perlite	X	X	X
Carbon Black 1333-86-4	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	2	0	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	2	0	0	Not determined

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Revision Date: 25-Sep-2013
Revision Note New 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 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