Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™ Scotch-Brite™ Products, SF Finishing and Deburring Wheels, S FIN, S MED
MANUFACTURER: 3M
DIVISION: Abrasive Systems Division
ADDRESS: 3M Center, St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 03/18/13
Supercedes Date: 10/12/12
Document Group: 18-8861-9

Product Use:
Intended Use: Abrasive Product

SECTION 2: INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>% by Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon Carbide Mineral</td>
<td>409-21-2</td>
<td>15 - 50</td>
</tr>
<tr>
<td>Lubricant</td>
<td>4485-12-5</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Filler</td>
<td>1317-65-3</td>
<td>&lt; 10</td>
</tr>
<tr>
<td>Additive</td>
<td>Trade Secret</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Quartz Silica</td>
<td>14808-60-7</td>
<td>0.04 - 0.3</td>
</tr>
<tr>
<td>Nylon Fiber</td>
<td>Mixture</td>
<td>1 - 15</td>
</tr>
<tr>
<td>Cured Resin</td>
<td>Mixture</td>
<td>45 - 80</td>
</tr>
<tr>
<td>Fiberglass Core</td>
<td>Mixture</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: Solid Abrasive Product
General Physical Form: Solid
Immediate health, physical, and environmental hazards: This document covers only the 3M product. For complete assessment, when determining the degree of hazard, the material being abraded must also be considered.
3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:
Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Dust created by cutting, grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:
Mechanical Skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

Inhalation:
Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Prolonged or repeated exposure may cause:
Pneumoconiosis: Sign/symptoms may include persistent cough, breathlessness, chest pain, increased amounts of sputum, and changes in lung function tests.

Ingestion:
No health effects are expected.

This product contains quartz silica. Cancer of the lungs and silicosis have been associated with quartz (crystalline) silica. No exposure to quartz (crystalline) silica is anticipated during normal intended use of 3M Coated and Surface Conditioning Abrasives. No detectable respirable quartz and other forms of crystalline silica were found when a simulated grinding air sampling study was conducted on analogous 3M Coated Abrasive and Surface Conditioning constructions that contained similar to or greater concentrations of crystalline silica. Therefore, the health effects associated with crystalline silica (e.g. quartz) are not expected during the intended use of this product.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>C.A.S. No.</th>
<th>Class Description</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz Silica</td>
<td>14808-60-7</td>
<td>Grp. 1: Carcinogenic to humans</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>Quartz Silica</td>
<td>14808-60-7</td>
<td>Known human carcinogen</td>
<td>National Toxicology Program Carcinogens</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact:  Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact:  Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

Inhalation:  Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed:  No need for first aid is anticipated.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoignition temperature</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Flammable Limits(LEL)</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>
Flammable Limits (UEL)  

**Not Applicable**

### 5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** None inherent in this product.

*Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.*

### SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Not applicable.

6.2. Environmental precautions

Not applicable.

**Clean-up methods**

Not applicable.

*In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.*

### SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid breathing of dust created by sanding, grinding or machining. Avoid eye contact with dust or airborne particles. Damaged product can break apart during use and cause serious injury to face or eyes. Check product for damage such as cracks or nicks prior to use. Replace if damaged. Always wear eye and face protection when working at sanding or grinding operations or when near such operations. Sparks and particles flying from the product during sanding or grinding can cause injury and fire.

7.2 STORAGE

Store in a cool, dry place.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Provide appropriate local exhaust ventilation for sanding, grinding or machining. Warning: Excessive operating speed or generation of extreme heat may result in harmful emissions. Use local exhaust ventilation. Provide ventilation adequate to control dust concentrations below recommended exposure limits and/or control dust. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control dust, fume, or airborne particles. If ventilation is not adequate, use respiratory protection equipment.
8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection
Avoid eye contact. To minimize the risk of injury to face and eyes, always wear eye and face protection when working at sanding or grinding operations or when near such operations.
The following eye protection(s) are recommended: Safety Glasses with side shields.

8.2.2 Skin Protection
Avoid skin contact. Wear appropriate gloves to minimize risk of injury to skin from contact with dust or physical abrasion from grinding or sanding.

8.2.3 Respiratory Protection
Avoid breathing of dust created by sanding, grinding or machining. Assess exposure concentrations of all materials involved in the work process. Consider material being abraded when determining the appropriate respiratory protection. Select and use appropriate respirators to prevent inhalation overexposure.
An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

8.2.4 Prevention of Swallowing
Wash hands after handling and before eating.

8.3 EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Authority</th>
<th>Type</th>
<th>Limit</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additive</td>
<td>CMRG</td>
<td>CEIL</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Filler</td>
<td>OSHA</td>
<td>TWA, respirable fraction</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Filler</td>
<td>OSHA</td>
<td>TWA, as total dust</td>
<td>15 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Quartz Silica</td>
<td>OSHA</td>
<td>TWA, respirable fraction</td>
<td>0.025 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Quartz Silica</td>
<td>ACGIH</td>
<td>TWA concentration, respirable</td>
<td>0.1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Quartz Silica</td>
<td>OSHA</td>
<td>TWA concentration, as total dust</td>
<td>0.3 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Silicon Carbide Mineral</td>
<td>ACGIH</td>
<td>TWA, as fiber</td>
<td>0.1 fiber/cc</td>
<td></td>
</tr>
<tr>
<td>Silicon Carbide Mineral</td>
<td>ACGIH</td>
<td>TWA, respirable fraction</td>
<td>3 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Silicon Carbide Mineral</td>
<td>ACGIH</td>
<td>TWA, inhalable fraction</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Silicon Carbide Mineral</td>
<td>OSHA</td>
<td>TWA, respirable fraction</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Silicon Carbide Mineral</td>
<td>OSHA</td>
<td>TWA, as total dust</td>
<td>15 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE OF EXPOSURE LIMIT DATA:
ACGIH: American Conference of Governmental Industrial Hygienists
CMRG: Chemical Manufacturer Recommended Guideline
OSHA: Occupational Safety and Health Administration
AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)
SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Odor, Color, Grade: Solid Abrasive Product
General Physical Form: Solid
Autoignition temperature: Not Applicable
Flash Point: Not Applicable
Flammable Limits(LEL): Not Applicable
Flammable Limits(UEL): Not Applicable
Boiling Point: Not Applicable
Vapor Density: Not Applicable
Vapor Pressure: Not Applicable
Specific Gravity: Not Applicable
pH: Not Applicable
Melting point: Not Applicable
Solubility In Water: Not Applicable
Evaporation rate: No Data Available
Kow - Oct/Water partition coef: No Data Available
Viscosity: No Data Available

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:
10.1 Conditions to avoid
None known

10.2 Materials to avoid
None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<table>
<thead>
<tr>
<th>Substance</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amine Compounds</td>
<td>During Combustion</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>During Combustion</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>During Combustion</td>
</tr>
<tr>
<td>Hydrogen Cyanide</td>
<td>During Combustion</td>
</tr>
<tr>
<td>Oxides of Nitrogen</td>
<td>During Combustion</td>
</tr>
</tbody>
</table>

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.
SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION
Not determined.

CHEMICAL FATE INFORMATION
Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: The substrate that was abraded must be considered as a factor in the disposal method for this product. Dispose of waste product in a sanitary landfill.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS
Contact 3M for more information.

311/312 Hazard Categories:
Fire Hazard - No  Pressure Hazard - No  Reactivity Hazard - No  Immediate Hazard - Yes  Delayed Hazard - Yes

STATE REGULATIONS
Contact 3M for more information.

CHEMICAL INVENTORIES
This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

INTERNATIONAL REGULATIONS
Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification
Health: 1  Flammability: 1  Reactivity: 0  Special Hazards: None
National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision Changes:
Copyright was modified.

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