SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: Aluminum Oxide Resinoid Bonded Cutting/Grinding Wheel

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Manufacturing

1.3. Details of the supplier of the safety data sheet

Weiler Corporation
1 Weiler Drive
Cresco, PA 18326

1.4. Emergency telephone number

Emergency number: 570-595-7495

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This product as manufactured is defined as an article per 29 CFR 1910.1200. No exposure hazards are anticipated during normal product handling conditions. In most cases, the material(s) removed from the workpiece may present a greater hazard than material released by the product. Based upon the materials that are contained within the working portion of this product it is possible that some dust particles from this product may be generated. The following safety data is presented for potential exposure hazards as associated with the dust particles that are related to this product.

Classification (GHS-US)
Not classified

2.2. Label elements

GHS-US labeling
This product as manufactured is defined as an article, therefore no labeling is required for the product as manufactured.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum oxide</td>
<td>(CAS No) 1344-28-1</td>
<td>80</td>
<td>Not classified</td>
</tr>
<tr>
<td>Fiberglass</td>
<td>None</td>
<td>10 - 15</td>
<td>Not classified</td>
</tr>
<tr>
<td>Trisodium hexafluoroaluminate</td>
<td>(CAS No) 15096-52-3</td>
<td>7</td>
<td>Acute Tox. 4 (Inhalation), H332, STOT RE 1, H372, Aquatic Chronic 2, H411</td>
</tr>
<tr>
<td>Silica, amorphous</td>
<td>(CAS No) 7631-86-9</td>
<td>4</td>
<td>Not classified</td>
</tr>
<tr>
<td>Wollastonite (Ca(SiO3))</td>
<td>(CAS No) 13983-17-0</td>
<td>3</td>
<td>Not classified</td>
</tr>
<tr>
<td>Iron oxide (Fe2O3)</td>
<td>(CAS No) 1309-37-1</td>
<td>0.05</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: Remove victim from source of exposure to fresh air. If breathing is difficult administer oxygen. Seek medical attention.

First-aid measures after skin contact: Wash with soap and water. Seek medical advice if skin irritation develops or persists.

First-aid measures after eye contact: Flush with plenty of water for at least 15 minutes. Seek medical advice if irritation develops or persists.
First-aid measures after ingestion: Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation: Dusts may cause coughing, shortness of breath. Prolonged breathing of dusts may affect breathing capacity.
Symptoms/injuries after skin contact: Dusts may cause skin irritation.
Symptoms/injuries after eye contact: Dust may irritate eyes.
Symptoms/injuries after ingestion: None under normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use carbon dioxide or water spray.
Unsuitable extinguishing media: None.

5.2. Special hazards arising from the substance or mixture

Fire hazard: None known.
Explosion hazard: None known.

5.3. Advice for firefighters

Protection during firefighting: Firefighters should wear full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
No additional information available

6.1.2. For emergency responders
No additional information available

6.2. Environmental precautions

None.

6.3. Methods and material for containment and cleaning up

For containment: No special measures required.
Methods for cleaning up: No special measures required.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Grinding and cut off wheels if dropped or damaged can cause serious bodily injury. Avoid usage if product has been dropped or damaged.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: No special storage conditions required.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Aluminum oxide (1344-28-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
</tr>
<tr>
<td>OSHA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Iron oxide (Fe2O3) (1309-37-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
</tr>
</tbody>
</table>
Aluminum Oxide Resinoid Bonded Cutting/Grinding Wheel
Safety Data Sheet

8.2. Exposure controls

Appropriate engineering controls:
Utilize adequate ventilation to minimize the exposure to airborne particulates and maintain the concentration of contaminants below the occupational exposure limits.

Respiratory Protection:
When exposure limits are exceeded or when the dust concentrations are excessive, approved respirators for those conditions should be used. When selecting the respiratory protection equipment, consideration of the exposure to the coating or the base materials being worked on should be included. Local regulations and standards should be followed where appropriate. The type of respiratory equipment used should be selected according to the contaminant type, form and concentration being produced. Select and use respirators in accordance with applicable regulations and good industrial hygiene practice.

Hand protection:
The use of cloth or leather gloves is recommended.

Eye Protection:
Safety goggles or face shield over safety glasses with side shields.

Hearing Protection:
Hearing protection may be required.

Skin and body protection:
The use of protective clothing should be used as needed to prevent the contamination of personal clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Cutting/Grinding wheel</td>
</tr>
<tr>
<td>Color</td>
<td>Dark brown to black</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>900 °F</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Aluminum Oxide Resinoid Bonded Cutting/Grinding Wheel
Safety Data Sheet

Specific gravity : 2
Relative vapor density at 20 °C : No data available
Solubility : Slight
Log Pow : No data available
Log Kow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions
Will not occur.

10.4. Conditions to avoid
None.

10.5. Incompatible materials
None.

10.6. Hazardous decomposition products
None. Dusts and decomposition odors are generated when product is in use.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

<table>
<thead>
<tr>
<th>Substance</th>
<th>Class</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum oxide (1344-28-1)</td>
<td></td>
<td>LD50 oral rat &gt; 5000 mg/kg</td>
</tr>
<tr>
<td>Iron oxide (Fe2O3) (1309-37-1)</td>
<td></td>
<td>LD50 oral rat &gt; 10000 mg/kg</td>
</tr>
<tr>
<td>Silica, amorphous (7631-86-9)</td>
<td></td>
<td>LD50 oral rat &gt; 5000 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 dermal rabbit &gt; 2000 mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LC50 inhalation rat (mg/l) &gt; 2.2 mg/l (Exposure time: 1 h)</td>
</tr>
<tr>
<td>Trisodium hexafluoroaluminate (15096-52-3)</td>
<td></td>
<td>LD50 oral rat &gt; 5 g/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Iron oxide (Fe2O3) (1309-37-1)
IARC group 3 - Not classifiable

Silica, amorphous (7631-86-9)
IARC group 3 - Not classifiable
Aluminum Oxide Resinoid Bonded Cutting/Grinding Wheel
Safety Data Sheet

<table>
<thead>
<tr>
<th>Wollastonite (Ca(SiO3)) (13983-17-0)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>3 - Not classifiable</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Silica, amorphous (7631-86-9)

LC50 fish 1 5000 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
EC50 Daphnia 1 7600 mg/l (Exposure time: 48 h - Species: Ceriodaphnia dubia)

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential

Silica, amorphous (7631-86-9)

BCF fish 1 (no bioaccumulation expected)

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects

Effect on ozone layer : No additional information available
Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not a dangerous good as defined in transport regulations

SECTION 15: Regulatory information

15.1. US Federal regulations

Aluminum oxide (1344-28-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on SARA Section 313 (Specific toxic chemical listings)
SARA Section 313 - Emission Reporting 1.0 % (fibrous forms)

Iron oxide (Fe2O3) (1309-37-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Silica, amorphous (7631-86-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Trisodium hexafluoroaluminate (15096-52-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State regulations

Aluminum oxide (1344-28-1)
U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Iron oxide (Fe2O3) (1309-37-1)
U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Silica, amorphous (7631-86-9)
U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Hazardous Substance List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Trisodium hexafluoroaluminate (15096-52-3)
U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Inhalation)</th>
<th>Acute toxicity (inhalation) Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Chronic 2</td>
<td>Hazardous to the aquatic environment - Chronic Hazard Category 2</td>
</tr>
<tr>
<td>STOT RE 1</td>
<td>Specific target organ toxicity (repeated exposure) Category 1</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.