SECTION 1 : PRODUCT AND COMPANY IDENTIFICATION

Product Name: Coated Abrasive
SDS Manufacturer Number: CA_All
Manufacturer Name: Saint-Gobain Abrasives, Inc.
Address: 1 New Bond Street
Worcester, MA 01615
Website: www.Nortonabrasives.com
General Phone Number: 508-795-5000
Emergency Phone Number: 508-795-5000

SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS#</th>
<th>Ingredient Percent</th>
<th>EC Num.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica, Quartz</td>
<td>14808-60-7</td>
<td>1 - 5 by weight</td>
<td>238-878-4</td>
</tr>
<tr>
<td>Epoxy Resin</td>
<td>No Data</td>
<td>5 - 10 by weight</td>
<td></td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>7631-86-9</td>
<td>10 - 30 by weight</td>
<td>231-545-4</td>
</tr>
<tr>
<td>Precipitated Calcium Carbonate</td>
<td>471-34-1</td>
<td>1 - 5 by weight</td>
<td>207-439-9</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>65997-18-4</td>
<td>5 - 10 by weight</td>
<td>266-047-6</td>
</tr>
<tr>
<td>Fiberglass</td>
<td>65997-17-3</td>
<td>1 - 5 by weight</td>
<td>266-046-0</td>
</tr>
<tr>
<td>Zirconium dioxide</td>
<td>1314-23-4</td>
<td>1 - 5 by weight</td>
<td>215-227-2</td>
</tr>
<tr>
<td>Cotton</td>
<td>No Data</td>
<td>10 - 30 by weight</td>
<td></td>
</tr>
<tr>
<td>Aliphatic Amines</td>
<td>No Data</td>
<td>1 - 5 by weight</td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>0 - 1 by weight</td>
<td></td>
</tr>
<tr>
<td>Aluminum Oxide, Non-fibrous</td>
<td>1344-28-1</td>
<td>10 - 30 by weight</td>
<td>215-691-6</td>
</tr>
<tr>
<td>Phenol formaldehyde polymer</td>
<td>9003-35-4</td>
<td>10 - 30 by weight</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 3 : HAZARDS IDENTIFICATION

Potential Health Effects:

Eye: Dust may cause slight irritation.
Skin: Dust from this product may cause temporary mechanical irritation.
Inhalation: Dusts from this product may cause mechanical irritation of the nose, throat and respiratory tract.
Ingestion: Ingestion of this product is unlikely. However, ingestion of product may produce gastrointestinal irritation and disturbances.

Chronic Health Effects: Chronic health effects are not expected as long as good hygiene and proper safety precautions are practiced.

Fiberglass

Inhalation: Fiberglass contained in wheels have fiber diameters greater than 10 um, therefore considered non-respirable.
Phenol formaldehyde polymer

Chronic Health Effects: Dust generated from intended use may contain trace amounts of phenol and formaldehyde which under excessive exposure may cause skin sensitization and airway obstruction.

SECTION 4 : FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get medical attention, if irritation or symptoms of overexposure persists.

Skin Contact: Immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.

Inhalation: If dust from cutting or drilling is inhaled, remove the affected person to fresh air. If symptoms persist, get medical attention.

Ingestion: Accidental ingestion of this material is unlikely. If this does occur, watch person for several days to make sure intestinal blockage does not occur. If symptoms persist, call a physician.

Note to Physicians: No information available.

SECTION 5 : FIRE FIGHTING MEASURES

Flammable Properties: Non Flammable.

Flash Point: Does not apply.

Auto Ignition Temperature: Not determined.

Lower Flammable/Explosive Limit: Not available.

Upper Flammable/Explosive Limit: Not available.

Extinguishing Media: Use any extinguishing media appropriate for the surrounding fires.

Unsuitable Media: None.

Protective Equipment: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA Ratings:

NFPA Health: 1
NFPA Flammability: 0
NFPA Reactivity: 1

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Methods for containment: Containment of this material should not be necessary.

Methods for cleanup: Shovel or sweep up for re-use or disposal. Avoid creating dusty conditions. Evaluate residue to determine if it is a hazardous waste by characteristic. Dispose of in accordance with Local, State, Federal and Provincial regulations.

SECTION 7 : HANDLING and STORAGE

Handling: Handle with adequate ventilation for nuisance dust.

Storage: No special storage conditions required.

Hygiene Practices: Wear suitable gloves and eye/face protection.

SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION - EXPOSURE GUIDELINES

Engineering Controls: General dilution ventilation and/or local exhaust ventilation should be provided as necessary to maintain exposures below occupational exposure limits.

Eye/Face Protection: Always WEAR SAFETY GLASSES or some type of eye protection when grinding.

Skin Protection Description: Protective gloves. Long sleeved shirt and long pants.

Respiratory Protection: When workers are facing airborne particulate/dust concentrations above the exposure limit they must use appropriate certified respirators. A properly fitted NIOSH approved disposable N 95 type dust respirator or better is recommended.

Other Protective: Use of this product may create elevated sound levels. Hearing protection should be worn where required (see OSHA 29 CFR 1910.134 and other applicable regulations).

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Avoid getting dust into boots and gloves through wrist bands and pant tucks.
## EXPOSURE GUIDELINES

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Guideline OSHA</th>
<th>Guideline ACGIH</th>
<th>Quebec Canada</th>
<th>Ontario Canada</th>
<th>Alberta Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica, Quartz</td>
<td></td>
<td>TLV-TWA: 0.025 mg/m$^3$ Respirable fraction (R)</td>
<td>VEMP-TWA: 0.1 mg/m$^3$ Respirable fraction (R)</td>
<td>OEL-TWAEV: 0.05 mg/m$^3$ Respirable fraction (R)</td>
<td>OEL-TWA: 0.1 mg/m$^3$ Respirable fraction (R)</td>
</tr>
<tr>
<td>Precipitated Calcium Carbonate</td>
<td>PEL-TWA: 5 mg/m$^3$ Respirable fraction (R)</td>
<td>PEL-TWA: 15 mg/m$^3$ Total particulate/dust (T)</td>
<td>VEMP-TWA: 10 mg/m$^3$ Total particulate/dust (T)</td>
<td>OEL-TWAEV: 10 mg/m$^3$</td>
<td>OEL-TWA: 10 mg/m$^3$</td>
</tr>
<tr>
<td>Fiberglass</td>
<td>PEL-TWA: 1 f/cc as Continuous filament glass</td>
<td>TLV-TWA: 5 mg/m$^3$ as Continuous filament glass</td>
<td>VEMP-TWA: 10 mg/m$^3$</td>
<td>OEL-TWA: 5 mg/m$^3$ Respirable fraction (R)</td>
<td>OEL-TWA: 10 mg/m$^3$ Total particulate/dust (T)</td>
</tr>
<tr>
<td>Zirconium dioxide</td>
<td></td>
<td>TLV-TWA: 10 mg/m$^3$ as zirconium compounds</td>
<td>VEMP-TWA: 10 mg/m$^3$ Total particulate/dust (T)</td>
<td>OEL-TWA: 10 mg/m$^3$ Total particulate/dust (T)</td>
<td>OEL-TWA: 10 mg/m$^3$</td>
</tr>
<tr>
<td>Aluminum Oxide, Non-fibrous</td>
<td>PEL-TWA: 5 mg/m$^3$ Respirable fraction (R)</td>
<td>PEL-TWA: 15 mg/m$^3$ Total particulate/dust (T)</td>
<td>TLV-TWA: 10 mg/m$^3$</td>
<td>VEMP-TWA: 10 mg/m$^3$ Total particulate/dust (T)</td>
<td>OEL-TWA: 10 mg/m$^3$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Mexico</th>
<th>British Columbia Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica, Quartz</td>
<td>LMPE-PPT: 0.1 mg/m$^3$ Respirable fraction (R)</td>
<td>OEL-TWA: 0.025 mg/m$^3$ Respirable fraction (R)</td>
</tr>
<tr>
<td>Precipitated Calcium Carbonate</td>
<td>LMPE-PPT: 10 mg/m$^3$ Inhalable fraction (I)</td>
<td>OEL-TWA: 3 mg/m$^3$ Inhalable fraction (I)</td>
</tr>
<tr>
<td>Aluminum Oxide, Non-fibrous</td>
<td>MPE-PPT: 0.1 mg/m$^3$ as Continuous filament glass</td>
<td>OEL-TWA: 3 mg/m$^3$ as Continuous filament glass</td>
</tr>
</tbody>
</table>

### SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

- **Physical State Appearance:** Solid article.
- **Odor:** Odorless.
- **Flash Point:** Does not apply.
- **Auto Ignition Temperature:** Not determined.

### SECTION 10: STABILITY and REACTIVITY

- **Chemical Stability:** Stable under normal conditions.
- **Hazardous Polymerization:** Hazardous polymerization does not occur.
- **Conditions to Avoid:** Keep away from heat, sparks, or open flame.
- **Special Decomposition Products:** In use, dust and decomposing odors may be generated. In most cases, the material removed from the workplace will be significantly greater than the sandpaper components. Coolants may produce other decomposition products. Thermal decomposition may produce trace amounts of ammonia and formaldehyde.

### SECTION 11: TOXICOLOGICAL INFORMATION

- **Acute Toxicity:** This product has not been tested for its toxicity.
  - **Crystalline Silica, Quartz:** RTECS Number: VV7330000
  - **Amorphous Silica:** RTECS Number: EU8655000
  - **Eye:** Eye - Rabbit Standard Draize test.: 25 mg/24H (RTECS)
  - **Precipitated Calcium Carbonate:** RTECS Number: FF9335000
  - **Eye:** Eye - Rabbit Standard Draize test.: 750 ug/24H (RTECS)
  - **Skin:** Administration onto the skin - Rabbit Standard Draize test.: 500 mg/24H (RTECS)
  - **Ingestion:** Oral - Rat LD$50$: 6450 mg/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)
Fiberglass:
RTECS Number: LK3651000

Zirconium dioxide:
RTECS Number: ZH8800000

Aluminum Oxide, Non-fibrous:
RTECS Number: BD1200000
Inhalation: Inhalation - Rat TCLo: 200 mg/m3/5H/28W (Intermittent) [Lungs, Thorax, or Respiration - Structural or functional change in trachea or bronchi; Lungs, Thorax, or Respiration - Chronic pulmonary edema; Related to Chronic Data - death] (RTECS)

Phenol formaldehyde polymer:
RTECS Number: SM8542500
Skin: Administration onto the skin - Rat LD50: >2 gm/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

SECTION 12: ECOLOGICAL INFORMATION
Ecotoxicity: No ecotoxicity data was found for the product.

SECTION 13: DISPOSAL CONSIDERATIONS
Waste Disposal: Use standard landfill methods consistent with applicable Federal, State, Provincial and local laws.

SECTION 14: TRANSPORT INFORMATION
DOT Shipping Name: Not regulated as hazardous material for transportation.
DOT UN Number: Not regulated as hazardous material for transportation.
IATA Shipping Name: Not regulated as hazardous material for transportation.
Canadian Shipping Name: This product is Not Regulated under the Transportation of Dangerous Goods Act. (CAN).

SECTION 15: REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>Inventory Status</th>
<th>Canada DSL</th>
<th>TSCA Inventory Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica, Quartz</td>
<td>Listed</td>
<td>Listed</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>Listed</td>
<td>Listed</td>
</tr>
<tr>
<td>Precipitated Calcium Carbonate</td>
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<td>Listed</td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>Listed</td>
<td>Listed</td>
</tr>
<tr>
<td>Zirconium dioxide</td>
<td>Listed</td>
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</tr>
<tr>
<td>Aluminum Oxide, Non-fibrous</td>
<td>Listed</td>
<td>Listed</td>
</tr>
<tr>
<td>Phenol formaldehyde polymer</td>
<td>Listed</td>
<td>Listed</td>
</tr>
</tbody>
</table>

Crystalline Silica, Quartz:
Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.1406(1491)

Amorphous Silica:
Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.1403(1488)

Aluminum Oxide, Non-fibrous:
Canada IDL: Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.50(1298)

Crystalline Silica, Quartz:
EC Number: 238-878-4

Amorphous Silica:
EC Number: 231-545-4

Precipitated Calcium Carbonate:
EC Number: 207-439-9
**Amorphous silica**
EC Number: 266-047-6

**Fiberglass**
EC Number: 266-046-0

**Zirconium dioxide**
EC Number: 215-227-2

**Aluminum Oxide, Non-fibrous**
EC Number: 215-691-6

### State Right To Know

<table>
<thead>
<tr>
<th></th>
<th>PA</th>
<th>MA</th>
<th>NJ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline Silica, Quartz</td>
<td>Listed</td>
<td>Listed</td>
<td></td>
</tr>
<tr>
<td>Amorphous Silica</td>
<td>Listed</td>
<td>Listed</td>
<td></td>
</tr>
<tr>
<td>Zirconium dioxide</td>
<td>Listed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aluminum Oxide, Non-fibrous</td>
<td>Listed</td>
<td>Listed</td>
<td>Listed: NJ Hazardous List; Substance Number: 2891</td>
</tr>
</tbody>
</table>

### SECTION 16: ADDITIONAL INFORMATION

**HMIS Ratings:**

- HMIS Health Hazard: 1
- HMIS Fire Hazard: 0
- HMIS Reactivity: 0
- HMIS Personal Protection: X

SDS Creation Date: August 15, 2009
SDS Revision Date: July 01, 2013

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