

According to Canadian Hazardous Products Regulations and WHMIS 2015

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Initial preparation date: 08.07.2019

### **Resin Bonded Abrasives**

### **SECTION 1: Identification**

#### **Product identifier**

Product name: Resin Bonded Abrasives

**Additional information:** This product is not hazardous as shipped and sold. However, during the grinding process, hazardous substances may be released and made available for exposure. The Hazard Classification in Section 2 and corresponding Label Elements are applicable to this product when used for grinding, sanding, mechanical abrasion or any other fabrication process that compromises the integrity of the disc.

### Recommended use of the product and restriction on use

Relevant identified uses: Coated abrasives for sanding of material.

Uses advised against: Any use other than described above.

Reasons why uses advised against: Not determined or not applicable.

#### Manufacturer or supplier details

#### Manufacturer:

**United States** 

CGW Abrasives 7525 N Oak Park Ave Niles, IL 60714 800-447-3731 sales@cgwcamel.com

# Emergency telephone number:

**United States** 

Emergency Phone Number 800-447-3731 (24/7)

#### **SECTION 2: Hazard identification**

#### GHS classification:

Skin irritation, category 2
Eye irritation, category 2A
Reproductive toxicity. Effects on or via lactation
Specific target organ toxicity - single exposure, category 3, respiratory tract irritation
Specific target organ toxicity - repeated exposure, category 1
Acute toxicity (inhalation), category 4

#### Label elements

#### **Hazard pictograms:**

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Signal word: Danger

#### Hazard statements:

H315 Causes skin irritation

H319 Causes serious eye irritation

H362 May cause harm to breast-fed children

H335 May cause respiratory irritation

H372 Causes damage to organs (liver, bones) through prolonged or repeated exposure.

H332 Harmful if inhaled

#### **Precautionary statements:**

P264 Wash hands thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection

P260 Do not breathe dust/fume/gas/mist/vapours/spray

P263 Avoid contact during pregnancy/while nursing

P270 Do not eat, drink or smoke when using this product

P271 Use only outdoors or in a well-ventilated area

P202 Do not handle until all safety precautions have been read and understood

P302+P352 IF ON SKIN: Wash with plenty of water/soap

P321 Specific treatment (see supplemental first aid instructions on this label)

P332+P313 If skin irritation occurs: Get medical advice/attention

P362+P364 Take off contaminated clothing and wash it before reuse

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P337+P313 If eye irritation persists: Get medical advice/attention

P308+P313 IF exposed or concerned: Get medical advice/attention

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312 Call a POISON CENTER/doctor if you feel unwell

P403+P233 Store in a well-ventilated place. Keep container tightly closed

P405 Store locked up

P501 Dispose of contents/container in accordance with local regulations.

#### Hazards not otherwise classified:

Prolonged exposure to metal fume or dust may cause Metal Fume Fever.

Finely dispersed particles may form explosive mixtures in air.

Exposure to airborne silica of respirable size can cause Silicosis, an incurable lung disease that can lead to disability and death; Lung cancer; Chronic obstructive pulmonary disease (COPD); and Kidney disease. Although not readily available, crystalline silica has been included in Section 3 (composition) and Section 8 (occupational exposure limits).

# SECTION 3: Composition/information on ingredients

| Identification        | Name           | Weight % |
|-----------------------|----------------|----------|
| CAS number: 1344-28-1 | Aluminum Oxide | 40-95    |

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| CAS number: 409-21-2   | Silicon carbide                  | 40-95 |
|------------------------|----------------------------------|-------|
| CAS number: 60304-36-1 | Aluminum potassium fluoride      | 5-40  |
| CAS number: 471-34-1   | Calcium Carbonate                | 2-30  |
| CAS number: 15096-52-3 | Trisodium hexafluoroaluminate    | 2-30  |
| CAS number: 13775-52-5 | Tripotassium hexafluoroaluminate | <25   |
| CAS number: 65997-17-3 | Glass, oxide, chemicals          | <13   |
| CAS number: 1314-23-4  | Zirconium dioxide                | 40-95 |
| CAS number: 14808-60-7 | Silica, crystalline quartz       | <13   |

#### **Additional Information:**

The concentration range for product ingredients represents the expected variable composition of the product as supplied and the variable composition of ingredients released during use. For more information about the composition for sampling purposes, contact CGW Abrasives.

#### **SECTION 4: First-aid measures**

### **Description of first-aid measures**

#### **General notes:**

Show this Safety Data Sheet to the doctor in attendance.

#### After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

#### After skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

### After eye contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present to do so. Protect unexposed eye. Continue rinsing. Get medical attention if irritation develops or persists.

# After ingestion:

Not a likely of exposure.

#### Most important symptoms and effects, both acute and delayed

# Acute symptoms and effects:

NHALATION of airborne dusts and fumes may cause respiratory irritation. Symptoms include cough, breathing difficulties, inflammation of the mucous membranes lining the respiratory tract and nose and throat pain. Excessive inhalation of fumes of freshly formed metal oxide particles may cause a flu-like

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illness called Metal Fume Fever.

SKIN CONTACT may result in skin irritation. Symptoms include redness, inflammation and itching.

EYE CONTACT with airborne dust and fume may cause serious eye irritation. Symptoms include: redness, tearing, burning and inflammation.

The Acute Effects described below are applicable to this product when used for grinding, sanding, mechanical abrasion or any other fabrication process that releases hazardous dust or fume.

# **Delayed symptoms and effects:**

The Delayed Effects described below are applicable to this product when used for grinding, sanding, mechanical abrasion or any other fabrication process that releases hazardous dust or fume.

Chronic exposure to Aluminum Oxide and Zirconium Oxide may cause lung damage; resulting in chronic bronchitis, COPD and pulmonary fibrosis.

Chronic exposure to fluoride and fluoride compounds may cause damage to teeth, bones (fluorosis) and lungs. Fluorosis is caused by a high fluoride concentration in the body. This causes the bones to harden and become less elastic, resulting in increased fractures, joint pain and immobility.

Chronic exposure to airborne silica of respirable size can cause Silicosis, an incurable lung disease that can lead to disability and death; Lung cancer; Chronic obstructive pulmonary disease (COPD); and Kidney disease.

Maternal exposure may cause harm to breast-fed children.

### Immediate medical attention and special treatment

#### **Specific treatment:**

If concerned or not feeling well, seek medical attention/advice.

#### Notes for the doctor:

Treat symptomatically.

# **SECTION 5: Fire-fighting measures**

### Extinguishing media

### Suitable extinguishing media:

Alcohol- resistant foam, Dry chemical or Carbon dioxide

### Unsuitable extinguishing media:

Do not use water jet as an extinguisher.

#### Specific hazards during fire-fighting:

Thermal decomposition may lead to the release of irritating and toxic substances, including: Carbon Oxides, Aluminum Oxides, Zirconium Oxides, Potassium Oxides, Silicon Oxides, Calcium Oxides, Sodium Oxides and Hydrogen Fluoride.

### Special protective equipment for firefighters:

Self-contained MSHA/NIOSH approved respiratory protection and full protective clothing should be worn when fumes and/or smoke from fire are present.

#### Special precautions:

This product is not combustible; however, consideration must be given to the potential fire or explosion hazards from the base material being processed. Many materials create flammable or explosive dusts or turnings when machined or ground.

# **SECTION 6: Accidental release measures**

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### Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

Wear appropriate respirator and protective clothing (see Section 8) as needed to avoid eye contact and inhalation of dust.

### **Environmental precautions:**

Prevent entry into drains, sewer and waterways.

Do not discharge into the environment.

#### Methods and material for containment and cleaning up:

Carefully sweep up or gather dry material, avoiding the creation of airborne dust. Place recovered product in appropriate container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

#### Reference to other sections:

Section 8: Personal Protective Equipment

Section 13: Disposal

#### **SECTION 7: Handling and storage**

#### Precautions for safe handling:

The Precautions for Safe Handling described below are applicable to this product when used for grinding, sanding, mechanical abrasion or any other fabrication process that releases hazardous dust or fume. Wear recommended personal protective equipment (see Section 8). Do not contaminate water, food, or feed by storage or disposal. Use only with adequate ventilation. Do not breathe dust or fume. Avoid contact with eyes, skin and clothing. Keep away from hot surfaces, open flame and sources of ignition. Do not eat, drink or smoke while using. Wash thoroughly after handling. Do not allow contaminated clothing outside of the workplace. Launder contaminated clothing before reuse.

#### Conditions for safe storage, including any incompatibilities:

Sore in a cool, dry place and out of direct sunlight.

Store at Temperatures, 15°C--27°C and Humidity, 40%- 50%.

Store away from hot surfaces (e.g. heater, radiator), open flame, ignition sources and incompatible materials. See Section 10 for incompatibles.

Do not place the materials on the ground or concrete floor.

# **SECTION 8: Exposure controls/personal protection**

Only those substances with limit values have been included below.

#### Occupational Exposure limit values:

| Country (Legal Basis) | Substance       | Identifier | Permissible concentration                                       |
|-----------------------|-----------------|------------|---|
| Alberta               | Aluminum Oxide  | 1344-28-1  | 8-Hour TWA: 10 mg/m³ (Total dust)                               |
|                       | Aluminum Oxide  | 1344-28-1  | 8-Hour TWA: 3 mg/m³ (Respirable)                                |
|                       | Silicon carbide | 409-21-2   | 8-Hour TWA: 10 mg/m³ ((Non-<br>fibrous, total particulate))     |
|                       | Silicon carbide | 409-21-2   | 8-Hour TWA: 3 mg/m³ ((Non-<br>fibrous, respirable particulate)) |

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| Country (Legal Basis) | Substance                        | Identifier | Permissible concentration  |
|-----------------------|----------------------------------|------------|--|
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 0.1 mg/m³ ((Fibrous, including whiskers))                            |
|                       | Aluminum potassium fluoride      | 60304-36-1 | 8-Hour TWA: 2.5 mg/m <sup>3</sup>  |
|                       | Trisodium hexafluoroaluminate    | 15096-52-3 | 8-Hour TWA: 2.5 mg/m³ (Fluorides, as F)  |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 8-Hour TWA: 2.5 mg/m³<br>(Fluorides, as F)                                       |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 8-Hour TWA: 2 mg/m³ (Aluminum, soluble salts, as Al)                             |
|                       | Zirconium dioxide                | 1314-23-4  | 8-Hour TWA: 5 mg/m³ ((as Zr))  |
|                       | Zirconium dioxide                | 1314-23-4  | 15-Minute STEL: 10 mg/m³ ((as Zr))   |
| British Columbia      | Aluminum Oxide                   | 1344-28-1  | 8-Hour TWA: 1 mg/m³ (Respirable )  |
|                       | Aluminum Oxide                   | 1344-28-1  | 8-Hour TWA: 10 mg/m³ (Total dust)  |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 10 mg/m³ ( (Non-<br>fibrous, inhalable))                             |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 3 mg/m³ ( (Non-<br>fibrous, respirable))                             |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 0.1 mg/m³ ((Fibrous, including whiskers))                            |
|                       | Aluminum potassium fluoride      | 60304-36-1 | 8-Hour TWA: 2.5 mg/m <sup>3</sup>  |
|                       | Trisodium hexafluoroaluminate    | 15096-52-3 | 8-Hour TWA: 1 mg/m³ (Aluminum metal and insoluble compounds, respirable)         |
|                       | Trisodium hexafluoroaluminate    | 15096-52-3 | 8-Hour TWA: 2.5 mg/m³<br>(Fluorides, as F)                                       |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 8-Hour TWA: 2.5 mg/m³ (Fluorides, as F)  |
|                       | Zirconium dioxide                | 1314-23-4  | 8-Hour TWA: 5 mg/m³ ((as Zr))  |
|                       | Zirconium dioxide                | 1314-23-4  | 15-Minute STEL: 10 mg/m³ ((as Zr))   |
| Manitoba              | Aluminum Oxide                   | 1344-28-1  | 8-Hour TWA: 1 mg/m³ (Respirable )  |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 10 mg/m³ ((Non-fibrous, inhalable))                                  |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 3 mg/m³ ((Non-fibrous, respirable))                                  |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 0.1 mg/m³ ((Fibrous, including whiskers))                            |
|                       | Aluminum potassium fluoride      | 60304-36-1 | 8-Hour TWA: 2.5 mg/m <sup>3</sup>  |
|                       | Trisodium hexafluoroaluminate    | 15096-52-3 | 8-HourTWA: 1 mg/m³ (Aluminum metal and insoluble compounds, respirable fraction) |
|                       | Trisodium hexafluoroaluminate    | 15096-52-3 | 8-Hour TWA: 2.5 mg/m³<br>(Fluorides, as F)                                       |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 8-Hour TWA: 2.5 mg/m³ (Fluorides as F)   |

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| Country (Legal Basis) | Substance                        | Identifier | Permissible concentration  |
|-----------------------|----------------------------------|------------|--|
|                       | Zirconium dioxide                | 1314-23-4  | 8-Hour TWA: 5 mg/m³ ((as Zr))  |
|                       | Zirconium dioxide                | 1314-23-4  | 15-Minute STEL: 10 mg/m³ ((as Zr))   |
| Ontario               | Aluminum Oxide                   | 1344-28-1  | 8-Hour TWA: 1 mg/m³ (Respirable)   |
|                       | Aluminum Oxide                   | 1344-28-1  | 8-Hour TWA: 10 mg/m³ (Inhalable )  |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 10 mg/m³ ((Non-<br>fibrous, inhalable))                              |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 3 mg/m³ ((Non-fibrous, respirable))                                  |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 0.1 mg/m³ ((Fibrous, including whiskers))                            |
|                       | Aluminum potassium fluoride      | 60304-36-1 | 8-Hour TWA: 2.5 mg/m <sup>3</sup>  |
|                       | Trisodium hexafluoroaluminate    | 15096-52-3 | 8-HourTWA: 1 mg/m³ (Aluminum metal and insoluble compounds, respirable fraction) |
|                       | Trisodium hexafluoroaluminate    | 15096-52-3 | 8-Hour TWA: 2.5 mg/m³ (Fluorides, as F)  |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 8-Hour TWA: 2.5 mg/m³ (Fluorides, as F)  |
|                       | Zirconium dioxide                | 1314-23-4  | 8-Hour TWA: 5 mg/m³ ((as Zr))  |
|                       | Zirconium dioxide                | 1314-23-4  | 15-Minute STEL: 10 mg/m³ ((as Zr))   |
| Quebec                | Aluminum Oxide                   | 1344-28-1  | 8-Hour TWA: 10 mg/m³ (Total dust)  |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 10 mg/m³ ((Non-<br>fibrous, total dust))                             |
|                       | Aluminum potassium fluoride      | 60304-36-1 | 8-Hour TWA: 2.5 mg/m <sup>3</sup>  |
|                       | Trisodium hexafluoroaluminate    | 15096-52-3 | 8-Hour TWA: 2.5 mg/m³ (Fluorides, as F)  |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 8-Hour TWA: 2 mg/m³ (Aluminum, soluble salts, as Al )                            |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 8-Hour TWA: 2.5 mg/m³ (Fluorides, as F)  |
|                       | Zirconium dioxide                | 1314-23-4  | 8-Hour TWA: 5 mg/m³ ((as Zr))  |
|                       | Zirconium dioxide                | 1314-23-4  | 15-Minute STEL: 10 mg/m³ ((as Zr))   |
| Saskatchewan          | Aluminum Oxide                   | 1344-28-1  | 8-Hour TWA: 10 mg/m³ (Inhalable )  |
|                       | Aluminum Oxide                   | 1344-28-1  | 15-Minute STEL: 20 mg/m³ (Inhalable)   |
|                       | Aluminum Oxide                   | 1344-28-1  | 8-Hour TWA: 3 mg/m³ (Respirable )  |
|                       | Aluminum Oxide                   | 1344-28-1  | 15-Minute STEL: 6 mg/m³ (Respirable)   |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 10 mg/m³ ((Non-fibrous, inhalable))                                  |

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| Country (Legal Basis) | Substance                        | Identifier | Permissible concentration   |
|-----------------------|----------------------------------|------------|---|
|                       | Silicon carbide                  | 409-21-2   | 15-Minute STEL: 20 mg/m³ ((Non-fibrous, inhalable))                         |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 3 mg/m³ ((Non-<br>fibrous, respirable fraction))                |
|                       | Silicon carbide                  | 409-21-2   | 15-Minute STEL: 6 mg/m³ ((Non-fibrous, respirable fraction))                |
|                       | Silicon carbide                  | 409-21-2   | 8-Hour TWA: 0.1 mg/m³ ((Fibrous, including whiskers) (Respirable fibers)))  |
|                       | Aluminum potassium fluoride      | 60304-36-1 | 8-Hour TWA: 10 mg/m³<br>((Aluminum, metal dust and<br>compounds, as Al))    |
|                       | Aluminum potassium fluoride      | 60304-36-1 | 15-Minute STEL: 20 mg/m³ ((Aluminum, metal dust and compounds, as Al))      |
|                       | Aluminum potassium fluoride      | 60304-36-1 | 8-Hour TWA: 2.5 mg/m³ ((Fluoride, as F))                                    |
|                       | Aluminum potassium fluoride      | 60304-36-1 | 15-Minute STEL: 5 mg/m <sup>3</sup> ((Fluoride, as F))                      |
|                       | Trisodium hexafluoroaluminate    | 15096-52-3 | 8-Hour TWA: 2.5 mg/m³<br>(Fluorides, as F)                                  |
|                       | Trisodium hexafluoroaluminate    | 15096-52-3 | 15-Minute STEL: 5 mg/m³ (Fluorides, as F)                                   |
|                       | Trisodium hexafluoroaluminate    | 15096-52-3 | 8-Hour TWA: 10 mg/m³ (Aluminum - metal dust and compounds, as Al)           |
|                       | Trisodium hexafluoroaluminate    | 15096-52-3 | 15-Minute STEL: 20 mg/m³<br>(Aluminum - metal dust and<br>compounds, as Al) |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 8-Hour TWA: 10 mg/m³ (Aluminum metal dust and compounds)                    |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 15-Minute STEL: 20 mg/m <sup>3</sup>  |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 8-Hour TWA: 2 mg/m³ (Aluminum, soluble salts)                               |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 15-Minute STEL: 4 mg/m <sup>3</sup>   |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 8-Hour TWA: 2.5 mg/m³ (Fluorides, as F)                                     |
|                       | Tripotassium hexafluoroaluminate | 13775-52-5 | 15-Minute STEL: 5 mg/m <sup>3</sup>   |
|                       | Zirconium dioxide                | 1314-23-4  | 8-Hour TWA: 5 mg/m³ ((as Zr))   |
|                       | Zirconium dioxide                | 1314-23-4  | 15-Minute STEL: 10 mg/m³ ((as Zr))  |
| Canada                | Calcium Carbonate                | 471-34-1   | 8-Hour TWA: 10 mg/m³ (Alberta)  |
|                       | Calcium Carbonate                | 471-34-1   | 15-Minute STEL: 20 mg/m³<br>((British Columbia) (Total Dust))               |
|                       | Calcium Carbonate                | 471-34-1   | 8-Hour TWA: 10 mg/m³ ((British Columbia)(Total Dust))                       |
|                       | Calcium Carbonate                | 471-34-1   | 8-Hour TWA: 3 mg/m³ ((British Columbia) (Respirable Fraction))              |
|                       | Calcium Carbonate                | 471-34-1   | 8-Hour TWA: 10 mg/m³ (Quebec)   |

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| Country (Legal Basis) | Substance                  | Identifier | Permissible concentration  |
|-----------------------|----------------------------|------------|--|
|                       | Calcium Carbonate          | 471-34-1   | 8-Hour TWA: 10 mg/m³<br>(Saskatchewan)   |
|                       | Calcium Carbonate          | 471-34-1   | 8-Hour TWA: 20 mg/m <sup>3</sup> (Saskatchewan)                                    |
|                       | Glass, oxide, chemicals    | 65997-17-3 | 8-Hour TWA: 5 mg/m³ (Alberta OELs)   |
|                       | Glass, oxide, chemicals    | 65997-17-3 | 8-Hour TWA: 5 mg/m³ (British Columbia OELs)  |
|                       | Glass, oxide, chemicals    | 65997-17-3 | 8-Hour TWA: 5 mg/m³ (Manitoba OELs)  |
|                       | Glass, oxide, chemicals    | 65997-17-3 | 8-Hour TWA: 5 mg/m³ (Ontario OELs)   |
|                       | Glass, oxide, chemicals    | 65997-17-3 | 8-Hour TWA: 5 mg/m <sup>3</sup> (Saskatchewan OELs)                                |
|                       | Silica, crystalline quartz | 14808-60-7 | TWA Exposure Limit Value: 0.025 mg/m³ (( 8 hrs ) (Alberta) (respirable))           |
|                       | Silica, crystalline quartz | 14808-60-7 | TWA Exposure Limit Value: 0.025 mg/m³ (( 8 hrs ) (British Columbia)(respirable))   |
|                       | Silica, crystalline quartz | 14808-60-7 | TWA Exposure Limit Value: 0.025 mg/m³ (( 8 hrs ) (Manitoba) (respirable fraction)) |
|                       | Silica, crystalline quartz | 14808-60-7 | TWA Exposure Limit Value: 10 mg/m³ (( 8 hrs ) (Ontario )(respirable fraction))     |
|                       | Silica, crystalline quartz | 14808-60-7 | TWA Exposure Limit Value: 0.1 mg/m³ (( 8 hrs ) (Quebec) (respirable))              |
|                       | Silica, crystalline quartz | 14808-60-7 | 15-Minute STEL: 0.05 mg/m³ ((Saskatchewan) (respirable fraction))                  |

#### **Biological limit values:**

No biological exposure limits noted for the ingredient(s).

### Information on monitoring procedures:

Not determined or not applicable.

# **Appropriate engineering controls:**

The Engineering Controls described below are applicable to this product when used for grinding, sanding, mechanical abrasion or any other fabrication process that releases hazardous dust or fume.

Use controls as appropriate to minimize exposure to metal fumes and dusts during handling operations. Provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust is necessary for use in enclosed or confined spaces. Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits

# Personal protection equipment

# Eye and face protection:

Safety goggles or safety glasses with side shields

Contact lenses should not be worn where industrial exposure to this material is likely. Wear safety

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glasses, face shield or goggles as required for welding, burning, sawing, brazing, grinding or machining operations.

#### Skin and body protection:

Contact lenses should not be worn where industrial exposure to this material is likely. Wear safety glasses, face shield or goggles as required for welding, burning, sawing, brazing, grinding or machining operations.

Cut resistant gloves and sleeves should be worn when working with metal parts. Protective gloves should be worn as required for grinding, welding and burning operations. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Personal protective equipment for the body should be selected based on the task being performed and the risks involved. For grinding, welding and burning operations, wear appropriate personal protective clothing to

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory protection

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determines the extent of respiratory protection needed.

# General hygienic measures:

Handle in accordance with good industrial hygiene and safety measures. Wash hands and face after handling chemical products. Wash hands before eating, drinking and smoking. Wash hands at the end of the workday.

### **SECTION 9: Physical and chemical properties**

### Information on basic physical and chemical properties

| Appearance (physical state, color): | Black, brown, red wheel          |
|-------------------------------------|----------------------------------|
| Odor:                               | light                            |
| Odor threshold:                     | Not determined or not available. |
| pH-value:                           | Not determined or not available. |
| Melting/Freezing point:             | Not determined or not available. |
| Boiling point/range:                | Not determined or not available. |
| Flash point:                        | Not determined or not available. |
| Evaporation rate:                   | Not determined or not available. |
| Flammability (solid, gaseous):      | Not determined or not available. |
| Explosion limit upper:              | Not determined or not available. |
| Explosion limit lower:              | Not determined or not available. |
| Vapor pressure:                     | Not determined or not available. |
| Vapor density:                      | Not determined or not available. |
| Density:                            | Not determined or not available. |
| Relative density:                   | Not determined or not available. |
| Solubilities:                       | Not determined or not available. |

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| Partition coefficient (n-octanol/water): | Not determined or not available. |
|--|----------------------------------|
| Auto/Self-ignition temperature:          | Not determined or not available. |
| Decomposition temperature:               | Not determined or not available. |
| Dynamic viscosity:                       | Not determined or not available. |
| Kinematic viscosity:                     | Not determined or not available. |
| Explosive properties                     | Not determined or not available. |
| Oxidizing properties                     | Not determined or not available. |

#### Other information

# **SECTION 10: Stability and reactivity**

# Reactivity:

Stable and non-reactive under normal conditions of use, storage and transport.

#### **Chemical stability:**

Stable under normal storage and handling conditions.

### Possibility of hazardous reactions:

Under normal conditions of storage and use, hazardous reactions will not occur.

#### Conditions to avoid:

Strong acids, Strong bases & Strong oxidizing agents may modify the mechanical characteristics of the products and create safety hazards when used on machines.

# Incompatible materials:

Strong Acids; Strong Bases; Strong Oxizing Agents

# **Hazardous decomposition products:**

Thermal decomposition may lead to the release of irritating and toxic substances, including: Carbon Oxides, Aluminum Oxides, Zirconium Oxides, Potassium Oxides, Silicon Oxides, Calcium Oxides, Sodium Oxides and Hydrogen Fluoride.

# **SECTION 11: Toxicological information**

# **Acute toxicity**

# **Assessment:**

Harmful if inhaled.

Product data: No data available.

### Substance data:

| Name                          | Route      | Result                        |
|-------------------------------|------------|-------------------------------|
| Silicon carbide               | oral       | LD50 Rat: 2000 mg/kg          |
|                               | dermal     | LD50 Rat: >2000 mg/kg         |
| Aluminum potassium fluoride   | dermal     | LD50 Rabbit: >2000 mg/kg      |
|                               | inhalation | LC50 Rat: 3.4 mg/L            |
|                               | oral       | LD50 Rat: >2000 mg/kg         |
| Trisodium hexafluoroaluminate | oral       | LD50 Rat: >5000 mg/kg         |
|                               | inhalation | LC50 Rat: 4.47 mg/L (4 hours) |
|                               | dermal     | LD50 Rabbit: >2000 mg/kg      |

# Skin corrosion/irritation

According to Canadian Hazardous Products Regulations and WHMIS 2015

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#### **Resin Bonded Abrasives**

#### **Assessment:**

Causes skin irritation.

**Product data:**No data available.

Substance data:

| Result                  |
|-------------------------|
| Causes skin irritation. |
|                         |

### Serious eye damage/irritation

#### **Assessment:**

Causes serious eye irritation.

Product data: No data available. Substance data:

| Name                             | Result                         |
|----------------------------------|--------------------------------|
| Aluminum potassium fluoride      | Causes serious eye irritation. |
| Tripotassium hexafluoroaluminate | Causes serious eye irritation. |

### Respiratory or skin sensitization

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**No data available.

Substance data: No data available.

### Carcinogenicity

**Assessment:** Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

| Name                       | Species        | Result                           |
|----------------------------|----------------|----------------------------------|
| Glass, oxide, chemicals    | Not applicable | May cause cancer via inhalation. |
| Silica, crystalline quartz | Not applicable | Component may cause cancer.      |

### International Agency for Research on Cancer (IARC):

| Name                       | Classification |
|----------------------------|----------------|
| Glass, oxide, chemicals    | Group 2B       |
| Silica, crystalline quartz | Group 1        |

National Toxicology Program (NTP): None of the ingredients are listed.

# Germ cell mutagenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**No data available.

Substance data: No data available.

# Reproductive toxicity

**Assessment:** 

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#### **Resin Bonded Abrasives**

May cause harm to breast-fed children.

#### Product data:

No data available.

#### Substance data:

| Name                        | Result                                 |
|-----------------------------|--|
| Aluminum potassium fluoride | May cause harm to breast-fed children. |

# Specific target organ toxicity (single exposure)

#### **Assessment:**

May cause respiratory irritation.

### **Product data:**

No data available.

#### Substance data:

| Name                | Result                            |
|---------------------|-----------------------------------|
| Tripotassium        | May cause respiratory irritation. |
| hexafluoroaluminate |                                   |

# Specific target organ toxicity (repeated exposure)

#### **Assessment:**

Causes damage to organs through prolonged or repeated exposure.

#### Product data:

No data available.

### Substance data:

| Name                          | Result   |
|-------------------------------|--|
| Aluminum potassium fluoride   | Causes damage to respiratory tract through prolonged or repeated exposure via inhalation.                          |
| Trisodium hexafluoroaluminate | Causes damage to organs (lungs and skeletal fluorosis) through prolonged or repeated exposure (oral & inhalation). |
| Zirconium dioxide             | Chronic exposure to Zirconium Oxide fumes or dust may damage the lungs.  |
| Silica, crystalline quartz    | Component affects the lungs through repeated exposure.   |

# **Aspiration toxicity**

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:**No data available.

Substance data: No data available.

# Information on likely routes of exposure:

No data available.

# Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

### Other information:

No data available.

# SECTION 12: Ecological information

# Acute (short-term) toxicity

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#### **Resin Bonded Abrasives**

**Assessment:** Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

| Name                          | Result                                   |
|-------------------------------|--|
| Aluminum potassium fluoride   | LC50 Danio rerio: >10 mg/L (96 hours)    |
|                               | EC50 Daphnia magna: 22.8 mg/L (48 hours) |
| Trisodium hexafluoroaluminate | LC50 Rainbow trout: 160 mg/L (24 hours)  |

### Chronic (long-term) toxicity

**Assessment:** Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

# Persistence and degradability

Product data: No data available. Substance data: No data available.

### **Bioaccumulative potential**

Product data: No data available. Substance data: No data available.

# Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

# **SECTION 13: Disposal considerations**

### **Disposal methods:**

Dispose of in accordance with all applicable local, regional, state and federal regulations.

### Contaminated packages:

Not determined or not applicable.

### **SECTION 14: Transport information**

# **Canadian Transportation of Dangerous Goods (TDG)**

| UN number                     | Not regulated |
|-------------------------------|---------------|
| UN proper shipping name       | Not regulated |
| UN transport hazard class(es) | None          |
| Packing group                 | None          |
| Environmental hazards         | None          |
| Special precautions for user  | None          |

#### **International Maritime Dangerous Goods (IMDG)**

| UN number               | Not regulated  |
|-------------------------|--|
| UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. Trisodium hexafluoroaluminate |

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#### **Resin Bonded Abrasives**

| UN transport hazard class(es) | 9   |
|-------------------------------|---|
| Packing group                 | III   |
| Environmental hazards         | Marine Pollutant<br>Trisodium hexafluoroaluminate |
| Special precautions for user  | None  |
| Stowage category              | A   |
| Excepted quantities           | E1  |
| Limited quantity              | 5 Kg  |

# International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

| UN number                     | Not regulated |
|-------------------------------|---------------|
| UN proper shipping name       | Not regulated |
| UN transport hazard class(es) | None          |
| Packing group                 | None          |
| Environmental hazards         | None          |
| Special precautions for user  | None          |

| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code |      |  |
|---|------|--|
| Bulk Name   | None |  |
| Ship type   | None |  |
| Pollution category  | None |  |

# **SECTION 15: Regulatory information**

# **Canada regulations**

### Domestic substances list (DSL):

| Listed | 13775-52-5 | Tripotassium hexafluoroaluminate | Not |
|--------|------------|----------------------------------|-----|
|        |            |                                  |     |

### Non-domestic substances list (NDSL):

| 13775-52-5 | Tripotassium hexafluoroaluminate | Listed |
|------------|----------------------------------|--------|
|------------|----------------------------------|--------|

# **SECTION 16: Other information**

# Abbreviations and Acronyms: None

# Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal 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

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# **Resin Bonded Abrasives**

with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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**End of Safety Data Sheet**