

**1. IDENTIFICATION**

**Product identifier:** Coated Abrasive Products

**Trade Name:** Spiral Bands, Sleeves, Flapwheels, Cartridge Rolls, Quick Change Discs, Belts, Discs (PSA & Non-PSA), Cross Pads, Power Pads, Square Pads, Resin Cloth Cones, Slotted & Unslotted Discs, Sheets, Resin Fibre Discs

**Manufacturer/ Distributor:** Radiac Abrasives, Inc.  
 A Tyrolit Company  
 1015 S. College Avenue  
 P.O. Box 1410  
 Salem, IL 62881

**Phone Number (08:00 – 16:00):** (800) 851-1095  
**Fax Number:** (888) 244-8234

**2. HAZARD(S) IDENTIFICATION**

The hazard identification is based on a formalistic procedure as the hazard statements of the ingredients are summarized in section 3. This does not correspond to the hazardousness of the product itself.

A greater hazard, in most cases, is the exposure to the dust/fumes from the material or paint/coatings being ground. Most of the dust generated during grinding is from the base material being ground and the potential hazard from this exposure must be evaluated. This dust may present a fire or dust explosion hazard and may present a serious health hazard.

**Classification:**

Physical	Health	Environment
Not Hazardous	Carcinogen Category 1 Specific Target Organ Toxicity – Repeat Exposure Category 1	Aquatic Acute Toxicity Category 3 Aquatic Chronic Toxicity Category 3

**Hazards not otherwise classified:** None

**Symbol(s)**



**Signal word**

Danger!

**Hazard statement(s)**

H350 May cause cancer by inhalation.  
 H372 Causes damage to lungs and skeletal system through prolonged or repeated exposure by inhalation and ingestion.  
 H412 Harmful to aquatic life with long lasting effects.

**Precautionary statement(s)**

P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P260 Do not breathe dust.  
 P264 Wash thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P273 Avoid release to the environment.

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P280 Wear protective gloves, protective clothing and eye protection.  
 P308 + P313 If exposed or concerned: Get medical attention  
 P314 Get medical attention if you feel unwell  
 P405 Store locked up.  
 P501 Dispose of contents and container in accordance with local and national regulations.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Mixtures:**

Chemical name	CAS No.	Concentration
Paper Backing	NA	≤75%
Aluminum Oxide/Ceramic	1344-28-1	≤65%
Cured Resin	NA	≤60%
Silicon Carbide	409-21-2	≤55%
Cloth Backing	NA	≤40%
Nylon Fiber	NA	≤30%
Inorganic Fluoride	14075-53-7	≤15%
Filler	13983-17-0	≤15%
Filler	1317-65-3	≤15%
Cryolite	15096-52-3	≤10%
Talc	14807-96-6	≤10%
Lubricant	4485-12-5	≤5%
Fiberglass Core	NA	≤5%
Titanium Dioxide	13463-67-7	≤2.75%
Silica	7631-86-9	≤2%
Pigment	1332-37-2	≤1.5%
Additive	26761-40-0	≤1.2%
Lubricant	64742-52-5	≤0.5%
Quartz Silica	14808-60-7	≤0.25%

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret and to cover products of variable composition. For more information about the composition for sampling purposes, contact Radiac Abrasives.

### 4. FIRST-AID MEASURES

**Inhalation:** Remove victim to fresh air. If symptoms persist or breathing is difficult, get medical attention.

**Skin contact:** Wash dust from skin with soap and water. Launder contaminated clothing before reuse.

**Eye contact:** Do not rub. Flush eyes thoroughly with plenty of water, holding open eyelids. Get medical attention if irritation persists. Obtain immediate medical attention for foreign body in the eye.

**Ingestion:** If grinding dust is swallowed, seek medical attention.

**Most important symptoms/effects, acute and delayed:** Dust may cause eye and skin irritation. Inhalation of dust may cause mucous membrane and respiratory irritation. Prolonged overexposure to respirable crystalline silica causes lung disease (silicosis) and increases the risk of lung cancer. Prolonged inhalation of cryolite has been shown to cause lung lesions based on animal studies. Prolonged ingestion of cryolite may result in bone fluorosis. Risk of cancer depends on duration and level of exposure.

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**Indication of immediate medical attention and special treatment, if necessary:** Immediate medical attention is generally not required.

### 5. FIRE-FIGHTING MEASURES

**Suitable (and unsuitable) extinguishing media:** Use water, carbon dioxide, foam or dry chemical to extinguish fire, depending on the surrounding materials.

**Specific hazards arising from the chemical:** 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.

**Special protective equipment and precautions for fire-fighters:** Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus. Contain water used in firefighting from entering sewers or natural waterways.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment, and emergency procedures:** Avoid contact with eyes. Avoid generating dust. Wear appropriate protective clothing and respirator as described in Section 8.

**Environmental precautions:** Avoid contamination of water supplies and environmental releases. Report spills as required to authorities.

**Methods and materials for containment and cleaning up:** Carefully collect dry material, avoiding the creation of airborne dust. Place in a suitable container for disposal.

### 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid contact with the eyes. Do not breathe dust. Wear protective clothing and equipment. Use with adequate ventilation and proper dust collection methods to keep exposure level below occupational exposure limits. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Consider potential exposure to components of the base materials or coatings being ground. Refer to OSHA's substance specific standards for additional work practice requirements where applicable.

**Conditions for safe storage, including any incompatibilities:** Store in accordance with ANSI B7.1. Protect from physical damage.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure guidelines:**

Paper Backing	None Established
Aluminum Oxide/Ceramic	15 mg/m <sup>3</sup> TWA OSHA PEL (total dust), 5 mg/m <sup>3</sup> TWA (respirable fraction)
Cured Resin	None Established
Silicon Carbide	0.1 mg/m <sup>3</sup> f/cc(F) TWA ACGIH TLV (including whiskers) 15 mg/m <sup>3</sup> TWA OSHA PEL (total dust), 5 mg/m <sup>3</sup> TWA (respirable fraction)
Cloth Backing	None Established
Nylon Fiber	None Established

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Inorganic Fluoride	None Established
Filler	None Established
Filler	15 mg/m <sup>3</sup> TWA OSHA PEL (total dust), 5 mg/m <sup>3</sup> TWA (respirable fraction)
Cryolite	2.5 mg/m <sup>3</sup> TWA OSHA PEL
Talc	2 mg/m <sup>3</sup> TWA ACGIH TLV (respirable) 20 mppcf TWA OSHA PEL
Lubricant	None Established
Fiberglass Core	None Established
Titanium Dioxide	10 mg/m <sup>3</sup> TWA ACGIH TLV 15 mg/m <sup>3</sup> TWA OSHA PEL (total dust)
Silica	None Established
Pigment	None Established
Additive	None Established
Lubricant	None Established
Quartz Silica	0.025 mg/m <sup>3</sup> TWA ACGIH TLV (respirable fraction), 0.05 mg/m <sup>3</sup> TWA OSHA PEL
Formaldehyde*	0.1 ppm TWA ACGIH TLV, 0.3 ppm STEL ACGIH TLV 0.2 0.75 ppm TWA OSHA PEL, 2 ppm STEL OSHA PEL

\*Product may release formaldehyde during use.

**Appropriate engineering controls:** Use local exhaust or general ventilation as required to minimize exposure to dust and maintain the concentration of contaminants below the TLVs.

**Individual protection measures, such as personal protective equipment:**

**Respiratory protection:** Use NIOSH approved respirator if exposure limits are exceeded or where dust exposures are excessive. Consider the potential for exposure to components of the coatings or base material being ground in selecting proper respiratory protection. Refer to OSHA's specific standards for lead, cadmium, etc. where appropriate. Selection of respiratory protection depends on the contaminant type, form and concentration. Select and use respirators in accordance with OSHA 1910.134 and good industrial hygiene practice.

**Skin protection:** Cloth or leather gloves recommended.

**Eye protection:** Safety goggles or glasses to avoid contact with dust.

**Other:** Protective clothing as needed to prevent contamination of personal clothing. Hearing protection may be required.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance (physical state, color, etc.):** Cloth or paper coated with abrasive material.

**Odor:** No Odor

<b>Odor threshold:</b> Not applicable	<b>pH:</b> Not applicable
<b>Melting point/freezing point:</b> Not applicable	<b>Initial boiling point and boiling range:</b> Not applicable
<b>Flash point:</b> Non-Combustible	<b>Evaporation rate:</b> Not applicable
<b>Flammability (solid, gas):</b> Not applicable	<b>UEL:</b> Not applicable
<b>Flammable limits: LEL:</b> Not applicable	<b>Vapor density:</b>
<b>Vapor pressure:</b> Not applicable	<b>Solubility(ies):</b> Not applicable
<b>Relative density:</b> Not available	<b>Auto-ignition temperature:</b> Not applicable
<b>Partition coefficient: n-ctanol/water:</b> Not applicable	<b>Viscosity:</b> Not applicable
<b>Decomposition temperature:</b> Not applicable	

### 10. STABILITY AND REACTIVITY

**Reactivity:** Not reactive

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**Chemical stability:** Stable

**Possibility of hazardous reactions:** Will not occur.

**Conditions to avoid:** None known

**Incompatible materials:** Strong acids and bases

**Hazardous decomposition products:** Dust from grinding could contain ingredients listed in Section 3 and other, potentially more hazardous components of the base material being ground or coatings applied to the base material.

### 11. TOXICOLOGICAL INFORMATION

**Likely routes of exposure:**

**Inhalation:** Inhalation of dust may cause irritation to the nose, throat and upper respiratory tract with coughing and shortness of breath.

**Ingestion:** No adverse effects expected for normal, incidental ingestion. Large amounts may cause gastrointestinal irritation or gastrointestinal blockage

**Skin contact:** None expected under normal use conditions. Rubbing product across the skin may cause mechanical irritation or abrasions.

**Eye contact:** Dust particles may cause abrasive injury to the eyes.

**Chronic effects from short- and long-term exposure:** Long-term overexposure to respirable dust may cause lung damage (fibrosis) with symptoms of coughing, shortness of breath and diminished breathing capacity. Prolonged inhalation of respirable crystalline silica may cause lung disease and cancer. Risk of cancer depends on the level and duration of exposure. Chronic inhalation of cryolite may cause lung lesions. Chronic ingestion of cryolite may result in skeletal fluorosis. Chronic effects may be aggravated by smoking. Prolonged exposure to elevated noise levels during operations may affect hearing. A greater hazard, in most cases, is the exposure to the dust/fumes from the material or paint/coatings being ground. Most of the dust generated during grinding is from the base material being ground and the potential hazard from this exposure must be evaluated.

**Numerical measures of toxicity:**

Paper Backing: No data available.

Aluminum Oxide/Ceramic: Oral rat LD50 >2000 mg/kg, Dermal rat LD50 >2000 mg/kg

Cured Resin: No data available.

Silicon Carbide: No data available.

Cloth Backing: No data available.

Nylon Fiber: No data available.

Inorganic Fluoride: Oral rat LD > 2000 mg/kg, inhalation rat LC50 > 5.3 mg/L

Filler: No data available.

Filler: No data available.

Cryolite: Oral rat LD50 > 5000 mg/kg, inhalation rat LC50: 4.47 mg/L, dermal rabbit LD50 > 2100 mg/kg

Talc: No data available.

Lubricant: No data available.

Fiberglass Core: No data available.

Titanium Dioxide: Oral rat LD50 > 5000 mg/kg, inhalation rat LC50 > 6.82 mg/L

Silica: Oral rat LD50 - >5000 mg/kg, Skin rabbit LD50 - >5000 mg/kg

Pigment: Oral rat LD50 > 10000 mg/kg

Additive: No data available.

Lubricant: Oral rat LD50 > 5000 mg/kg, inhalation rat LC50: 2.18 mg/L, dermal rabbit LD50 > 2000 mg/kg

Quartz Silica: Oral Rat LD50 - >22,500 mg/kg.

**Carcinogenicity:** Titanium dioxide is listed by IARC as a group 2B carcinogen (possible human carcinogen). Crystalline silica quartz is listed as "Carcinogenic to Humans" (Group 1) by IARC, "Known to be a Human Carcinogen" by NTP, as is an OSHA Listed Carcinogen. None of the other components of this product are listed as carcinogens by OSHA, IARC, NTP, or the EU CLP.

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### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:**

Inorganic Fluoride: Leuciscus idus LC50: 760 mg/L/96hr

Cryolite: Danio Rerio LC50: 99 mg/L/96hr

Titanium Dioxide: Danio rerio NOEC &gt; 0.87 mg/L

Pigment: Danio rerio LC0 =&gt; 500000 mg/L

Lubricant: Pimephales promelas LL50 &gt; 100 mg/L

This product is classified as harmful to aquatic life with long lasting effects.

**Persistence and degradability:** Biodegradation is not applicable to inorganic compounds.**Bioaccumulative potential:** No data available**Mobility in soil:** No data available.**Other adverse effects:** No data available.

### 13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable local, state/provincial and federal regulations. Local regulations may be more stringent than regional and national requirements. It is the responsibility of the waste generator to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.

### 14. TRANSPORT INFORMATION

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
<b>DOT</b>	None	Not Regulated	None	None	None
<b>TDG</b>	None	Not Regulated	None	None	None

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not applicable – product is transported only in packaged form.

**Special precautions:** None identified.

### 15. REGULATORY INFORMATION

**SARA Section 311/312 Hazard Categories:** Not Applicable (manufactured articles)

**SARA Section 313:** This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 (Toxic Chemical Release Reporting):

Components	C.A.S. #	WT %
Aluminum Oxide (fibrous forms)	1344-28-1	≤65%

**California Proposition 65:** WARNING You create dust when you cut, sand, drill or grind materials such as wood, paint, cement, masonry or metal. This dust often contains chemicals known to cause cancer, birth defects or other reproductive harm.

This SDS has been prepared in accordance with US OSHA HazCom 2012 and Canadian WHMIS 2015 regulations.

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<b>16. OTHER INFORMATION</b>
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**NFPA Rating:** Health = 1      Flammability = 0      Instability = 0  
**HMIS Rating:** Health = 1\*      Flammability = 0      Physical Hazard = 0  
\*Chronic Health Hazard

**Date of Revision:** 03/13/2018

The information and recommendations set forth are taken from sources believed to be accurate. Radiac Abrasives, Inc., a Tyrolit Company, makes no warranty with respect to the accuracy of this information or the suitability of these recommendations, assumes no liability to any user thereof. It is the responsibility of the user to investigate and understand pertinent sources of information to comply with all laws and procedures applicable to the safe use and handling of the product and to determine the suitability of the product for its intended use.

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**DANGER**



**Hazard statement(s)**

H350 May cause cancer by inhalation.

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**Precautionary statement(s)**

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