

**1. IDENTIFICATION**

**Product Identity / Trade Name:** Coated Abrasives - Resin over Resin, Cotton Cloth, Fiber, Polyester Backing or Paper (Dry Wall Sheets, Cloth or Paper Sheets, Flap Wheels, Flap Discs, Discs, PSA Cloth Discs, Paper Stearate Discs, Shop Rolls, Abrasive Belts, Floor Sanding Products)

**Product Use:** Abrasive materials used for sanding metals, concrete, masonry and building materials.

**Restriction on Use:** Use only as directed

**Date of Preparation:** March 31, 2015

**2. HAZARD(S) IDENTIFICATION**

As sold, this product is a manufactured article. During processing, dust generated has the following hazards:

**Classification:**

Physical	Health
Not Hazardous	Specific Target Organ Toxicity – Repeated Exposure Category 1 (Respiratory tract, teeth and bones)

**Labeling Elements:**



Danger!

**Hazard statement(s)**

H372 Causes damage to respiratory tract, teeth and bones through prolonged or repeated exposure.

**Precautionary statement(s)**

P260 Do not breathe dust.  
 P264 Wash thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P314 Get medical attention if you feel unwell.  
 P501 Dispose of contents and container in accordance with local and national regulations.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical name	CAS No.	Concentration
Aluminum Oxide	1344-28-1	0-50
and/or Silicon Carbide	409-21-2	0-50
and/or Garnet	12178-41-5	0-30
and/or Zirconium Oxide	1314-23-4	0-30
Cured Phenolic or Urea Formaldehyde Resin	N/A	5-40
and/or Calcium Carbonate	1317-65-3	0-25
and/or Calcium Stearate	1592-23-0	5-10
and/or Calcium Sulfate	7778-18-9	0-5
and/or Zinc Stearate	557-05-1	0-10
and/or Cryolite (as fluorides)*	15096-52-3	0-15
and/or Potassium Fluoroborate	14075-53-7	5-0
and/or Flame Retardant	Proprietary	0-8
And/or Kaolin	1332-58-7	0-5
and/or Crystalline Silica, Quartz*	14808-60-7	0.1-1
Cotton or Polyester Cloth	N/A	15-55
and/or paper backing	N/A	20-65
and/or fibre	N/A	35-70

\* Test data indicates that the crystalline silica in this product is inextricably bound in a manner that no exposure occurs during normal use and handling. Therefore this product is not classified as a carcinogen.

**The specific identity and/or exact percentage has been withheld as a trade secret.**

#### 4. FIRST-AID MEASURES

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

**Inhalation:** If overexposed to sanding dust, remove victim to fresh air and get medical attention.

**Eye Contact:** Flush eyes thoroughly with water, holding open eyelids. Get medical attention if irritation persists. Obtain immediate medical attention for foreign body in the eye.

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

**Most important symptoms/effects, acute and delayed:** May cause mechanical eye and skin irritation. Inhalation of dust may cause nose, throat and upper respiratory irritation. Exposure to dust generated from processing the base material or coatings may present additional health hazards.

**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 any media that is appropriate for the surrounding fire.

**Specific hazards arising from the chemical:** This product is not combustible, however, consideration must be given to the potential fire/explosion hazards from the base material being processed. Many materials create flammable/explosive dusts or turnings when sanded, 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.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment, and emergency procedures:** Wear appropriate respirator and protective clothing as needed to avoid eye contact and inhalation of dust.

**Environmental precautions:** Avoid release into the environmental. Report spills as required to authorities.

**Methods and materials for containment and cleaning up:** Pick up, sweep up or vacuum and place in a container for disposal. Minimize generation of dust.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Use only with adequate ventilation. Avoid breathing dust. Wash thoroughly after handling and use, especially before eating, drinking or smoking. Consider potential exposure to components of the base materials or coatings being sanded or ground. Refer to OSHA's substance specific standards for additional work practice requirements where applicable.

**Conditions for safe storage, including any incompatibilities:** Store in a dry location.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure guidelines:

Aluminum Oxide	5 mg/m <sup>3</sup> ACGIH TLV (respirable fraction) (as Al metal) 15 mg/m <sup>3</sup> TWA OSHA PEL (total dust) 5 mg/m <sup>3</sup> TWA OSHA PEL (respirable fraction)
Silicon Carbide	3 mg/m <sup>3</sup> TWA ACGIH TLV (respirable fraction) 10 mg/m <sup>3</sup> TWA ACGIH TLV (inhalable fraction) 15 mg/m <sup>3</sup> TWA OSHA PEL (total dust) 5 mg/m <sup>3</sup> TWA OSHA PEL (respirable fraction)
Garnet	None Established
Zirconium Oxide (as Zr)	5 mg/m <sup>3</sup> TWA ACGIH TLV 10 mg/m <sup>3</sup> STEL ACGIH TLV 5 mg/m <sup>3</sup> TWA OSHA PEL
Cured Phenolic or Urea Formaldehyde Resin	None Established
Calcium Carbonate	15 mg/m <sup>3</sup> TWA OSHA PEL (total dust) 5 mg/m <sup>3</sup> TWA OSHA PEL (respirable fraction)
Calcium Stearate	None Established
Calcium Sulfate	10 mg/m <sup>3</sup> TWA ACGIH TLV (inhalable) 15 mg/m <sup>3</sup> TWA OSHA PEL (total dust) 5 mg/m <sup>3</sup> TWA OSHA PEL (respirable fraction)
Zinc Stearate	10 mg/m <sup>3</sup> TWA ACGIH TLV 15 mg/m <sup>3</sup> TWA OSHA PEL (total dust) 5 mg/m <sup>3</sup> TWA OSHA PEL (respirable fraction)
Cryolite (as fluorides)	2.5 mg/m <sup>3</sup> TWA ACGIH TLV 2.5 mg/m <sup>3</sup> TWA OSHA PEL
Potassium Fluoroborate (as fluorides)	2.5 mg/m <sup>3</sup> TWA ACGIH TLV 2.5 mg/m <sup>3</sup> TWA OSHA PEL
Flame Retardant	None Established
Kaolin	2 mg/m <sup>3</sup> TWA ACGIH TLV (respirable) 15 mg/m <sup>3</sup> TWA OSHA PEL (total dust) 5 mg/m <sup>3</sup> TWA OSHA PEL (respirable fraction)
Cotton or Polyester Cloth	None Established
Crystalline Silica, Quartz	10 mg/m <sup>3</sup> (respirable) OSHA PEL % Silica + 2

	30 mg/m <sup>3</sup> (total dust) OSHA PEL % Silica + 2 0.025 mg/m <sup>3</sup> TWA ACGIH TLV
Paper Backing	None Established
Fiber	None Established

Note: Consider also components from base materials and coatings.

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

**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 face shield over safety glasses with side shields.

**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 in sheets, discs or on wheels.

**Odor:** No Odor

<b>Odor threshold:</b> Not applicable	<b>pH:</b> Not applicable
<b>Melting point/freezing point:</b> Not applicable	<b>Boiling Point:</b> Not applicable
<b>Flash point:</b> Not applicable	<b>Evaporation rate:</b> Not applicable
<b>Flammability (solid, gas):</b> Not combustible	
<b>Flammable limits: LEL:</b> Not applicable	<b>UEL:</b> Not applicable
<b>Vapor pressure:</b> Not applicable	<b>Vapor density:</b>
<b>Relative density:</b> Not applicable	<b>Solubility(ies):</b> Not soluble
<b>Partition coefficient: n-octanol/water:</b> Not applicable	<b>Auto-ignition temperature:</b> Not applicable
<b>Decomposition temperature:</b> Not applicable	<b>Viscosity:</b> Not applicable

**10. STABILITY AND REACTIVITY**

**Reactivity:** Not reactive.

**Chemical stability:** Stable.

**Possibility of hazardous reactions:** None known.

**Conditions to avoid:** None known

**Incompatible materials:** None known

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

**11. TOXICOLOGICAL INFORMATION**

**Routes of exposure:**

**Inhalation:** Dust may cause respiratory irritation.

**Ingestion:** None expected under normal use conditions. Swallowing large pieces may cause obstruction of the gastrointestinal tract.

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

**Eye contact:** Dust may cause eye irritation. 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. Chronic effects may be aggravated by smoking. Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling and sometimes fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function. Test data indicates that the crystalline silica in this product is inextricably bound in a manner that no exposure occurs during normal use and handling. Prolonged overexposure to fluorides may cause a bone condition, fluorosis.

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 sanded. Most of the dust generated during sanding is from the base material being sanded and the potential hazard from this exposure must be evaluated.

**Carcinogenicity:** Crystalline silica quartz is listed as "Carcinogenic to Humans" (Group 1) by IARC and "Known to be a Human Carcinogen" by NTP. The crystalline silica is inextricably bound in a manner that no exposure occurs during normal use and handling. None of the other components are listed as a carcinogen or potential carcinogen by OSHA, NTP or IARC.

**Numerical measures of toxicity:**

Aluminum Oxide: LD50 Oral rat >5,000 mg/kg, Inhalation rat LC50 >7.6 mg/L/1 hr

Silicon Carbide: Oral rat LD50 >2000 mg/kg, Dermal rat LD50 >2000 mg/kg

Garnet: No toxicity data available

Zirconium Oxide: Oral rat LD50 > 5000 mg/kg, Inhalation rat LC50 > 4.3 mg/L/4 hr.

Calcium Carbonate: No toxicity data available

Calcium Stearate: No toxicity data available

Calcium Sulfate: Oral rat LD50>1581 mg/kg, Inhalation rat LC50 >3.26 mg/L/4 hr

Zinc Stearate: LD50 oral rat > 1581 mg/kg, LC50 inhalation rat > 3.26 mg/L

Cryolite: LD50 oral rat > 10000 mg/kg, LC50 inhalation rat > 200 mg/L, LD50 dermal rabbit > 2000 mg/kg

Potassium Fluoroborate: Oral rat LD50 >2000 mg/kg, Inhalation rat LC50 >5.3 mg/L/4 hr

Kaolin: Oral rat LD50 >5000 mg/kg

Crystalline Silica, Quartz: No toxicity data available

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:**

Aluminum Oxide: 96 hr LC50 Pimephales promelas 35 mg/L

Silicon Carbide: No data available

Garnet: No data available

Zirconium Oxide: 96 hr LC50 Danio rerio >100 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 72 hr EC50

Calcium Carbonate: No data available

Calcium Stearate: No data available

Calcium Sulfate: 96 hr LC50 Pimephales promelas >1970 mg/L, 48 hr EC50 daphnia magna >79 mg/L, 72 hr

EC50 Pseudokirchnerella subcapitata >79 mg/L

Zinc Stearate: No data available

Cryolite: Danio rerio LC50 > 100 mg/L/96hr

Potassium Fluoroborate: 96 hr LC50 Leuciscus idus 760 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 72 hr

EC50 Pseudokirchnerella subcapitata >100 mg/L

Kaolin: No data available

Crystalline Silica, Quartz: 72 hr LC50 carp >10,000 mg/L

**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
DOT	None	Not Regulated	None	None	
TDG	None	Not Regulated	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 %
Zinc Stearate (as zinc compounds)	557-05-1	0-10

(Only in 9x11 Sheets - No Load Stearate, Fileboard Sheets - No Load, PSA Paper Discs - Stearate and Premium and Hook and Loop Paper Discs - Premium)

**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.

**16. OTHER INFORMATION**

**NFPA Rating:** Health = 1      Flammability = 0      Instability = 0  
**HMIS Rating:** Health = 1      Flammability = 0      Physical Hazard = 0

**Date Previous Revision:** 12/01/09

**Date This Revision:** 3/31/15

**Revision Summary:**

12/01/09: Section 8 Exposure Limits; Comprehensive Review

3/31/15: Changed all sections. Updated format to GHS.

The preceding information is believed to be correct and current as of the date of preparation of this Material Safety Data Sheet. Since the use of this information and the conditions of use of this product are not within the control of United Abrasives, Inc., it is the user's obligation to assure safe use of this product.