

Acme Abrasive

ACME HOLDING COMPANY

Resin Bonded Grinding Wheels Safety Data Sheet

Section 1. Identification

Product Name: Resin Bonded Grinding Wheels

Product Code:

Recommended use: Abrasive machining

Restrictions on use: None identified

Manufacturer Name: Acme Abrasive (Acme Holding Co.)

Address: 24200 Marmon Ave
Warren, Michigan 48089

Telephone number: (586) 759-3332

Emergency phone number: (586) 759-3332

Date of Preparation: April 3, 2015

Section 2. Hazard(s) Identification

Classification:

Physical	Health
None	Carcinogen Category 2B

Label Elements

Danger!



Hazard statements

May cause damage to lungs and respiratory system through prolonged or repeated exposure through inhalation of dust.
Causes eye irritation.
Dust may form combustible dust concentrations in air.

Precautionary statements

AVOID INHALATION OF DUST generated by grinding and cutting operations. Use approved NIOSH or MSHA respirators, safety glasses or face shields, gloves and protective clothing. Provide adequate ventilation to eliminate dust or maintain dust as classified by OSHA. Dispose of contents in accordance with local / regional regulations.

Supplemental Labeling: 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. This dust may present a fire or dust explosion hazard and may present a serious health hazard.

Section 3. Composition / Information on Ingredients
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Chemical name	CAS No.	Concentration
Aluminum Oxide, Non-Fibrous	1344-28-1	0-90 %
Zirconium Oxide	1314-23-4	0-75 %
Silicon Carbide	409-21-2	0-90 %
Cured Phenol Formaldehyde Polymer	9003-35-4	10-25 %
Iron Pyrite	1309-36-0	0-20 %
Cryolite	15096-52-3	0-20 %
Wollastonite	13983-17-0	0-20 %
Kyanite	1302-76-7	0-20 %
Lime	1305-78-8	0-5 %
Fiberglass	65997-17-3	1-5%
Iron	1309-37-1	0-2 %
Alpha-Alumina	1344-28-1	0-2%
Silicates (amorphous)	7440-21-3	0-2%
Titanium Dioxide	13463-67-7	0-<1%

The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4. First-Aid Measures

Eyes: Remove contact lenses if present and easy to do. Flush eyes thoroughly with large amounts of water, holding eyelids open. If irritation persists, seek medical attention.

Skin: Wash skin with soap and water. If irritation or other symptoms develop, seek medical attention.

Ingestion: Do not induce vomiting. Rinse mouth with water. Seek medical attention if large amount is swallowed or if you feel unwell.

Inhalation: Move person to fresh air. If breathing is difficult, have qualified personnel administer oxygen. Seek medical attention if irritation or other symptoms persist.

Most important symptoms/effects, acute and delayed: Dust may cause eye and respiratory irritation. Prolonged inhalation of high concentration of dust may cause adverse effects on the lungs. 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 should not be required.

Section 5. Fire-Fighting Measures
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Suitable (and unsuitable) extinguishing media: Use any media that is suitable for the surrounding fire. Do not use water on fires involving metals dusts. Use an appropriate dry powder.

Specific hazards arising from the chemical: This product is not flammable or 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 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.

Section 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 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.

Section 7. Handling and Storage

Precautions for safe handling: Avoid breathing dust. Use with adequate ventilation. Avoid eye and skin contact with grinding dust. Wear suitable gloves, eye protection and appropriate protective clothing according to the operation. Wash thoroughly after handling. 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 B7.1-2000.

Section 8. Exposure Controls / Personal Protection

Exposure guidelines:

Aluminum Oxide	5 mg/m ³ TWA (respirable) OSHA PEL 15 mg/m ³ TWA (total dust) OSHA PEL 1 mg/m ³ TWA ACGIH TLV
Zirconium Oxide	5 mg/m ³ TWA (respirable) OSHA PEL 5 mg/m ³ TWA (total dust) OSHA PEL 10 mg/m ³ TWA ACGIH TLV
Silicon Carbide	5 mg/m ³ TWA (respirable) OSHA PEL 15 mg/m ³ TWA (total dust) OSHA PEL 3 mg/m ³ TWA (respirable) ACGIH TLV 10 mg/m ³ TWA (inhalable) ACGIH TLV
Phenol Formaldehyde Polymer	None Established
Iron Pyrite	None Established
Cryolite	2.5 mg/m ³ TWA (total dust) OSHA PEL 2.5 mg/m ³ TWA ACGIH TLV
Wollastonite	5 mg/m ³ TWA (respirable) OSHA PEL 15 mg/m ³ TWA (total dust) OSHA PEL

	10 mg/m ³ TWA ACGIH TLV
Kyanite	.1 mg/m ³ TWA (respirable) OSHA PEL .025 mg/m ³ TWA (respirable) ACGIH TLV 10 mg/m ³ TWA (inhalable) ACGIH TLV
Lime	2 mg/m ³ TWA (respirable) OSHA PEL 2 mg/m ³ TWA (respirable) ACGIH TLV
Fiberglass	5 mg/m ³ TWA (respirable) OSHA PEL 15 mg/m ³ TWA (total dust) OSHA PEL 5 mg/m ³ TWA (Inhalable) ACGIH TLV 1 f/cc TWA (respirable fraction) ACGIH TLV
Iron	10 mg/m ³ TWA (total dust) OSHA PEL 5 mg/m ³ TWA ACGIH TLV
Alpha-Alumina	5 mg/m ³ TWA (respirable) OSHA PEL 15 mg/m ³ TWA (total dust) OSHA PEL 1 mg/m ³ TWA (respirable) ACGIH TLV
Silicates (Amorphous)	15 mg/m ³ TWA (total dust) OSHA PEL 15 mg/m ³ TWA (respirable) ACGIH TLV
Titanium Dioxide	15 mg/m ³ TWA (total dust) OSHA PEL 10 mg/m ³ TWA ACGIH TLV

Note: Consider also components of base materials and coatings being ground.

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Personal Protective Equipment:

Respiratory protection: Not necessary unless workplace concentrations of hazardous constituents exceed the exposure limits. If the exposure levels are excessive and irritation or other symptoms are experienced, an approved respirator should be worn. 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. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134 and ANSI Z88.2 or other applicable regulations and standards and good Industrial Hygiene practice.

Skin protection: Protective gloves recommended to avoid skin abrasion when handling grinding wheels. Wear protective clothing as required to avoid skin contact when handling.

Eye protection: Use safety glasses with side shields or goggles.

Other: Hearing protection recommended if operation is noisy.

Section 9. Physical and Chemical Properties
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Appearance: Colored solid wheel.

Odor: No odor.

Odor threshold: Not available	pH: Not applicable
Melting point/freezing point: Not available	Boiling point: Not applicable
Flash point: Not flammable	Evaporation rate: Not applicable
Flammability (solid, gas): Not flammable	
Flammable limits: LEL: Not applicable	UEL: Not applicable
Vapor pressure: Not applicable	Vapor density: Not applicable

Relative density: Not available	Solubility in Water: Insoluble
Partition coefficient: n-octanol/water: Not applicable	Auto-ignition temperature: Not applicable
Decomposition temperature: Not available	

Section 10. Stability and Reactivity

Reactivity: Not reactive under normal conditions of use and storage.

Chemical stability: Stable

Possibility of hazardous reactions: None known.

Conditions to avoid: None known. .

Incompatible materials: None known.

Hazardous decomposition products: None known. Dust from grinding could contain potentially hazardous components of the base material being ground or coatings applied to the base material.

Section 11. Toxicological Information

Acute effects of exposure:

Inhalation: Breathing dust may cause irritation to the nose, throat and upper respiratory tract.

Skin Contact: May cause abrasive skin irritation.

Eye Contact: May cause abrasive irritation and injury.

Ingestion: Not toxic. Swallowing may cause gastrointestinal disturbances or obstruction.

Chronic Health Effects: Excessive inhalation of respirable dust may cause may cause a progressive, disabling and sometimes fatal lung disease. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function. 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.

Sensitization: No data available for the product. Not expected to be a skin sensitizer based on human experience.

Germ Cell Mutagenicity: This product is not expected to present a risk of genetic damage.

Reproductive Toxicity: No specific data is available; however, this product is not expected to present a risk of adverse reproductive or developmental toxicity.

Carcinogenicity: Titanium dioxide is listed by IARC as "Possibly Carcinogenic to Humans" (Group 2B). None of the other components greater than 0.1% are listed as a carcinogen by IARC, NTP, ACGIH or OSHA

Acute toxicity values:

Aluminum Oxide: LD50 Oral rat >10000 mg/kg; LC50 Inhalation rat >2.3 mg/L/4 hr

Silicon Carbide: LD50 oral rat >2,000 mg/kg; LD50 dermal rabbit >2,000 mg/kg;

Zirconium Dioxide: LD50 Oral rat >5000 mg/kg; LC50 Inhalation rat >4.3 mg/L/4 hr

Phenol Formaldehyde Polymer: No acute toxicity data available

Iron Pyrite: No acute toxicity data available

Titanium Dioxide: LD50 Oral rat >5000 mg/kg; LC50 Inhalation rat >6.82 mg/L/4 hr

Fiberglass: No acute toxicity data available

Section 12. Ecological Information

No adverse effects on aquatic organisms are expected. However, consideration must be given to potential environment effects of the base material being processed.

Ecotoxicity values:

Aluminum oxide: NOEC 96 hr Salmo trutta >100 mg/L; NOEC 48 hr daphnia magna >100 mg/L; NOEC 72 hr Selenastrum capricornutum >100 mg/L
 Zirconium Dioxide: LL50 96 hr Danio rerio >1000 mg/L; EC50 48 hr daphnia magna >100 mg/L
 Silicon Carbide: No data available.
 Phenol Formaldehyde Polymer: No acute toxicity data available
 Iron Pyrite: No data available
 Titanium Dioxide: EC50 72 hr Pseudokirchnerella subcapitata 61 mg/L
 Fiberglass: LC50 96 hr Danio rerio >1000 mg/L; EC50 72 hr daphnia magna >1000 mg/L; EC50 72 hr Pseudokirchnerella subcapitata >1000 mg/L

Persistence and degradability: Biodegradation is not applicable to inorganic substances.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Other adverse effects: None known.

Section 13. Disposal Considerations

Dispose in accordance with all local, state and national 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.

Section 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.

Section 15. Regulatory Information

Safety, health, and environmental regulations specific for the product in question.

CERCLA Hazardous Substances (Section 103)/RQ: This product is not subject to CERCLA release reporting. Many states have more stringent spill reporting requirements. Report spills in accordance will all applicable regulations.

SARA Hazard Category (311/312):

- N – Fire Hazard
- N – Sudden Release of Pressure

N – Reactivity
N – Acute Health
Y – Chronic Health

EPA SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313:
None

California Proposition 65: This product contains the following chemicals known to the State of California to cause cancer or reproductive toxicity: titanium dioxide (13463-67-7) 0-<1% (cancer). Dust created from cutting, drilling or grinding may contain chemicals known to cause cancer, birth defects or other reproductive harm.

EPA TSCA Inventory: This product meets the definition of an article and is exempt from the TSCA inventory requirements.

Section 16. Other Information

NFPA RATING (NFPA 704)	FIRE: 0	HEALTH: 1	INSTABILITY: 0
HMIS RATING	FIRE: 0	HEALTH: 1*	PHYSICAL HAZARD: 0

SDS Revision History: New SDS
Date of preparation: 03 April 2015
Date of last revision: None

DISCLAIMER

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Acme Abrasive (Acme Holding Co) shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.