MODERN ABRASIVES
Safety Data Sheet

1. IDENTIFICATION

Product identifier: Rubber Bond Abrasive Products
Trade Name: Grinding Wheels or Stones

Manufacturer: Modern Abrasive Corp.
2855 Route 12
Spring Grove, IL 60081

Phone Number: (815) 675-2352
Emergency Number: (815) 676-2352

Revision date: 5/25/15

2. HAZARD(S) IDENTIFICATION

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

Classification:

Physical	Health	Environment
Not Hazardous	Skin Irritation Category 2 Skin Sensitization Category 1 Acute Inhalation Toxicity Category 4 Specific Target Organ Toxicity – Repeat Exposure Category 1	Aquatic Acute Toxicity Category 3 Aquatic Chronic Toxicity Category 3

Labelling:

Symbol(s)

Signal word
Danger!

Hazard statement(s)
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H362 May cause harm to breast fed children.
H372 Causes damage to respiratory tract through prolonged inhalation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.
P260 Do not breathe dust or fumes.
P263 Avoid contact during pregnancy and while nursing.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves.
P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313: If skin irritation or rash occurs: Get medical attention.
P362+P364" Take of contaminated clothing and wash it before

reuse.
P304+P340: Remove person to fresh air and keep comfortable for breathing.
P308+P313 IF exposed or concerned: Get medical attention.
P501 Dispose of contents and container in accordance with local, regional and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Concentration
Sulphur	7704-34-9	0-2%
Aluminum Oxide	1344-28-1	30-80%
Silicon Carbide	409-21-2	30-80%
Natural Rubber	9006-04-6	5-30%
Iron Oxide	1317-60-8	0-2%
Potassium Aluminum Fluoride	14484-69-6	0-2%

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

4. FIRST-AID MEASURES

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult have qualified personnel administer oxygen. Get medical attention if you feel unwell.
Skin contact: Remove contaminated clothing. Wash skin with soap and water for several minutes. Get medical attention if irritation or rash occurs. Launder clothing before re-use.
Eye contact: Flush with water. Seek medical attention if irritation persists.
Ingestion: No first aid required. Seek medical attention if large pieces swallowed.

Most important symptoms/effects, acute and delayed: No adverse effects expected.

Indication of immediate medical attention and special treatment, if necessary: No immediate medical attention is normally required.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use any media that is suitable for the surrounding fire.

Specific hazards arising from the chemical: 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. Dust generated by the abrasive products may be explosive in the correct air/dust mixture.

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: No special precautions required.

Methods and materials for containment and cleaning up: Pick up or sweep up and place in a container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities: Store in a dry location. Protect from physical damage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

Sulphur	None Established
Aluminum Oxide	5 mg/m3 ACGIH TLV (respirable fraction) (as Al metal) 15 mg/m3 TWA OSHA PEL (total dust), 5 mg/m3 TWA (respirable fraction)
Silicon Carbide	3 mg/m3 TWA ACGIH TLV (respirable fraction), 10 mg/m3 TWA (inhalable fraction) 15 mg/m3 TWA OSHA PEL (total dust), 5 mg/m3 TWA (respirable fraction)
Natural Rubber	0.0001 mg/m3 TWA ACGIH TLV (inhalable) (skin)
Iron Oxide	None Established
Potassium Aluminum Fluoride	None Established

Appropriate engineering controls: Use local exhaust or general ventilation as required to minimize exposure 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. 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: Impervious 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.): Solid abrasive product.
Odor: Slight odor.

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

10. STABILITY AND REACTIVITY

Reactivity: Not reactive
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. Dust generated by the abrasive products may be explosive in the correct air/dust mixture.

11. TOXICOLOGICAL INFORMATION

Likely routes of exposure:
Inhalation: Harmful if inhaled. Inhalation of dust or mists may cause irritation of the nose, throat and upper respiratory tract.
Ingestion: None expected under normal use conditions. Swallowing large pieces may cause obstruction of the gastrointestinal tract.
Skin contact: Contact with dust may cause irritation and an allergic reaction. 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 may cause damage to respiratory tract. 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:
Product ATE: Inhalation 0.85 mg/L (dust)
Sulphur: Oral rat LD50 > 2000 mg/kg, inhalation rat LC50 > 5.43 mg/L, dermal rat LD50 > 2000 mg/kg
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
Natural Rubber: No data available.
Iron Oxide: No data available.
Potassium Aluminum Fluoride: Oral rat LD50: 2150 mg/kg, inhalation rat LC50 > 3.4 mg/L/1hr, dermal rabbit LD50 > 2000 mg/kg

Carcinogenicity: None of the components are listed as a carcinogen or potential carcinogen by OSHA, NTP or IARC.

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Sulphur: Oncorhynchus mykiss LC0 > 0.005 mg/L/96hr
Aluminum Oxide: 96 hr LC50 Pimephales promelas 35 mg/L
Silicon Carbide: Oral rat LD50 >2000 mg/kg, Dermal rat LD50 >2000 mg/kg
Potassium Aluminum Fluoride: Danio rerio LC50 > 10 mg/L/96hr

This product is classified as harmful to the environment with long lasting effects.
Persistence and degradability: Biodegredation 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	None
TDG	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	Proprietary

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 = 2 Flammability = 0 Instability = 0
HMIS Rating: Health = 2 Flammability = 0 Physical Hazard =0

Date of current revision: 05/25/2015
Revision History: Updated GHS format. All section revised
Date of previous revision: 01/01/2014

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