SAFETY DATA SHEET

Revison Date: JAN 2024

SECTION 1 – IDENTIFICATION

Product Identifier: Resin Bonded Abrasive
Products Manufacturer Name: Metlab Corporation
Address: 4011 Hyde Park Blvd. Niagara Falls NY 14305
Phone: 800-828-6866
Fax: 716-282-6971
Emergency: 888-255-3924
Recommended Use: Cutting
Use Restrictions: Dangerous, improper use may cause wheel breakage and serious injury. Do not abuse, over speed or drop wheel. Safe to use only if mounted, guarded and operated according to ANSI B7.1 and OSHA Regulations. Read safety tips in package. Always use a guard!

SECTION 2 - HAZARD(S) IDENTIFICATION

Hazard Status: This product is classified as hazardous under OSHA Hazard Communication Standard, 29 CFR 1910.1200
Label elements:

HMIS Hazard Rating	
Health	1
Flammability	1
Reactivity	1
Personal Protection	E

Pictograms: Warning

Description of Hazard(s):
Respiratory: Wheel dust is a respiratory irritant
Skin: Wheel dust is a skin irritant
Ingestion: Acute product toxicity unknown
Eyes: Wheel dust is an eye irritant
Chronic: Potential chronic effects include skin sensitization and restricted breathing Wear respirator, eye protection and protective clothing when using product. Product will produce sparks and debris when in use, never use this product near reactive or flammable substances Never use product if it comes in contact with water.
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.

Refer to Section 8 for more specific Exposure & PPE details.

SECTION 3 - COMPOSITION

CHEMICAL NAME	Formula	CAS #	Wt%*
Aluminum Oxide, Non-fibrous		1344-28-1	0-92
Silicon Carbide		409-21-2	0-92
Zirconium Oxide		1314-23-4	0-93
Phenolic Resin (Cured)		NA	8-18
Calcium Oxide		1 305-78-8	0-4
Iron Di-Sulphied (Pyrite)		1 2068-85-8	0-12
Potassium Flouraborate		1 4075-53-7	0-10
Iron Oxide		1 309-38-2	0-12
Cryolite		15096-52-3	0-15

* Exact percentage not disclosed due to trade secrets

SECTION 4 - FIRST-AID MEASURES

Required Treatment:

Eyes: Remove contact lenses if present. 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 to fresh air. If breathing is difficult, have qualified personnel administer oxygen. Seek medical attention if irritation or other symptoms persist.
Symptoms – Effects, Acute Delayed:
Dust may cause eye and respiratory irritation. Prolonged inhalation of high concentration of dust may cause adverse effects on the lungs. Contains titanium dioxide. Prolonged overexposure to respirable dust may increase the risk of lung cancer. Risk of cancer depends on duration and level of exposure. Exposure to dust generated from processing the base material or coatings may present additional health hazards.

SECTION 5 - FIRE-FIGHTING MEASURES:

NFPA Ratings: Health: 1, Flammability: 1, Reactivity: 0, Other:0

Extinguishing Techniques including Equipment: Use suitable media for the surrounding fire. Do not use water on fires involving metals dusts. Use an appropriate dry powder. Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing equipment.

Chemical Hazards from Fire: These products are 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.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Emergency Procedures: Environmental: Avoid contamination of water supplies and environmental releases. Report spills as required by authorities.
Protective Equipment: Wear appropriate respirator and protective clothing as needed to avoid eye contact and inhalation of dust.
Methods of Containment and Clean-Up: Collect dry material, avoiding creating airborne dust. Place in a suitable container for disposal.

SECTION 7 - HANDLING AND STORAGE:

Handling: Inspect wheel prior to mounting on machine for damage. Do not use at speeds greater than product maximum rates per minute (rpm) as indicated. Use with adequate ventilation. Avoid breathing dust. Avoid eye and skin contact with grinding dust. Wear suitable eye protection, gloves and appropriate protective clothing. Wash thoroughly after handling. Consider

potential exposure to components of the base materials or coatings being ground or cut. Refer to OSHA substance specific standards for additional work practice requirements where applicable.

Storage: No special storage required. Avoid excessive temperatures in storage. Store in a dry area

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION:

Chemical Name	OSHA (PEL) respirable (mg/m3)	OSHA (PEL) total dust (mg/m3)	AGHI (TLV) (mg/m3)
Aluminum Oxide, Non-fibrous	5	15	10
Silicon Carbide	5	15	3
Zirconium Oxide	5	none	10
Phenolic Resin (Cured)	none	none	none
Calcium Oxide	5	none	2
Iron Pyrites	none	none	none
Potassium Fluoborate	2.5	none	2.5
Iron Oxide	10	none	5
Cryolite	2.5	2.5	2.5

Ventilation: Engineering controls recommended. See ANSI Z43.1. Refer to OSHA 29 CFR 1910.94. Respiratory: OSHA/NIOSH approved respirator. See OSHA 29 CFR 1910.134
Eye Protection: Protective eyewear such as safety goggles, safety glasses or face shield is recommended. See OSHA 29 CF1910.133.
Protective Gloves: Leather gloves.
Hearing Protection: Hearing protection such as earplugs or approved earmuffs. Refer to OSHA 29 CFR 1910.95.
Body/Skin Protection: Leather apron, fire retardant jacket/shirt/lab coat to shield from heavy spark showers in operation.
Other Protections/Precautions: Visually inspect all wheels before mounting for possible damage. Do not operate above maximum operating speed. Always use a guard. Refer to ANSI B7.1 for Safety Requirements for the Use, Care and Protection of Abrasive Wheels.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Various shades of brown and black color solid bonded wheel.
Solubility in water: Insoluble
Odor: None, faint phenolic odor
Boiling Point: N/A
Flammability or Explosive Limits: Not flammable
Flash Point: Not flammable
Vapor Pressure: N/A
Evaporation Rate: N/A
Odor Threshold: N/A
Flammability (solid, gas): Not flammable
Vapor Density: N/A
Auto-ignition Temperature: N/A
pH: N/A
Decomposition Temperature: 800 °F (425 °C)
Relative Density: N/A
Viscosity: N/A
Melting Point/Freezing Point: N/A

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use and storage.
Chemical Stability: Stable
Hazardous Polymerization: Will not occur

Other: Dust from grinding and cutting could contain potentially hazardous components of the base material being ground or coatings applied to the base material.

SECTION 11 - TOXICOLOGICAL INFORMATION:

Routes of Exposure: Inhalation, skin contact, eye contact and ingestion
Related Symptoms: Breathing in dust may cause irritation to the nose, throat and upper respiratory tract. Skin exposure may cause skin irritation. May cause eye irritation and injury. Not toxic if ingested. Swallowing may cause gastrointestinal disturbances or obstructions.
Acute and Chronic Effects: Prolonged inhalation of respirable dust may cause adverse lung effects, including cancer. Smoking may aggravate chronic effects. Prolonged exposure to elevated noise levels during operations may affect hearing. In most cases, the greater hazard is the exposure to the dust/fumes from the material (paint/coatings) being cut and ground. Most of dust is generated during grinding and cutting of the base material and the potential hazard from this exposure must be evaluated.
Carcinogenicity: Unknown
Mutagenicity: Unknown
Reproductive Effects: Unknown

Chemical Name	Exposure Route	Acute LD50 result -g/kg(rat)
Aluminum Oxide, Non-fibrous	Oral	10
Silicon Carbide	Oral	2
Zirconium Oxide	Oral	5
Potassium Fluoborate	Oral	5
Cryolite	Oral	5
Phenol Formaldehyde polymer	Skin	2
Phenol Formaldehyde polymer	Oral	5

Aluminum Oxide, Non-fibrous :
RTECS Number:
Inhalation: BD1200000
Inhalation - Rat TCLo: 200 mg/m3/5H/28W (Intermittent) [Lungs, Thorax, or Respiration - Structural or functional change in trachea or bronchi; Lungs, Thorax, or Respiration - Chronic pulmonary edema; Related to Chronic Data - death] (RTECS)
Acute Toxicity: This product has not been tested for its toxicity.

SECTION 12 - ECOLOGICAL INFORMATION*:
Data from Toxicity Tests: No adverse effects on aquatic organisms are expected.
SECTION 13 - DISPOSAL CONSIDERATIONS*: Proper Disposal Practices: Disposal practices are in accordance with local, state and national regulations.
SECTION 14 - TRANSPORT INFORMATION*: Proper Transport of Hazard Material: Not regulated as a hazardous material for transport.
SECTION 15 - REGULATORY INFORMATION* :Safety, Health and Environmental Regulations:

CHEMICAL	TSCA STATUS	CANADA DSL	CANADA IDL	EURO-EC #	LISTED STATES
Hexamethylenetetramine	Listed	Listed	Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.997(1104)	202-905-8	
Phenol formaldehyde polymer :	Listed	Listed			
Aluminum Oxide, Non-fibrous :	Listed	Listed	Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.50(1298)	215-691-6	**NJ,MA,PA,MN,Ill,RI**

SECTION 16 – OTHER INFORMATION: JAN 2018 creation date

*Note: sections 12 through 16 are not regulated by OSHA due to other regulating bodies requirements.