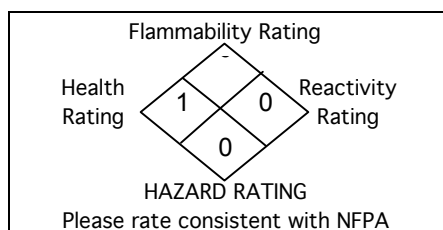


**MATERIAL  
SAFETY  
DATA SHEET**



**SECTION I - NAME AND PRODUCT**

MANUFACTURER'S <b>Preferred Abrasives, Inc.</b>	CONTACT
ADDRESS (CITY, STATE, AND ZIP) <b>66 Industry Court Unit B Troy, Ohio 45373</b>	EMERGENCY TELEPHONE <b>(800) 729-5702</b>
TRADE NAME, COMMON NAME, OR SPECIFICATION <b>Zirc Plus - R203</b>	APPROVED BY: <b>Thomas Gulker</b> DATE: <b>Jan. 1, 2008</b>
CHEMICAL FAMILY OR PRODUCT TYPE ANY <b>Abrasive products, PSA Discs, Belts, Quick-Lock Discs</b>	

**SECTION II - COMPOSITION**

CHEMICAL NAME	%	COMMON NAME	REG* (Y/N)	CAS #	OSHA PERMISSIVE EXPOSURE LIMIT	ACGIH TLV	CARCIN- OGEN (Y/N)
ALUMINUM OXIDE	13-16	ALPHA ALUMINA	Y	1344-28-1	15mg/M3	5mg/M3	N
Al <sub>2</sub> O <sub>3</sub>		(Abrasive Grain)			(Total Dust)	(Total Dust)	
ZIRCONIA OXIDE	8-10	ZIRCONIA(NZ, ZF, ZS)	N	1314-23-4	5mg/M3	5mg/M3	N
ZrO <sub>2</sub>					(as Zr)	(as Zr)	
Duroplastic Phenol or Urea Resin binder, & Inert Backing	60-70	Inert or Nuisance Dust	Y	N/A	15mg/M3	5mg/M3	N
					(Total Dust)	(Total Dust)	
Potassium Fluoroborate	3	Filler	N	NAIF	15mg/M3	5mg/M3	N
Aliphatic Petroleum Distillates	7-9	PSA Adhesive	N				N

\*Maximums are required by OSHA 29 CFR 1910.1200 Hazard Communication Standard.

\*\*Please note that steel, aluminum, and/or die cast hardware may be incorporated in this product. These portions in no way represent a hazard when handled in accordance with the measures set below.

**SECTION III - PHYSICAL AND CHEMICAL DATA**

BOILING POINT	N/A	MELTING POINT	N/A	SPECIFIC GRAVITY	N/A
VAPOR PRESSURE	N/A	PERCENT VOLATILE BY VOL.	N/A	VAPOR DENSITY	N/A
EVAPORATION RATE	N/A	SOLUBILITY IN WATER	N/A	SOLUBILITY IN ALCOHOL	N/A
SOLUBILITY IN OTHER SOLVENTS	APPEARANCE AND ODOR				
N/A	Abrasive disc with adhesive backing.				

**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT	N/A	(METHOD USED)	N/A	FLAMMABLE LMTS.	N/A
EXTINGUISHING MEDIA	Water, Carbon Dioxide, Foam, Dry Chemical				
SPECIAL FIRE FIGHTING PROCEDURE	Fiber and resin binder will burn or decompose; use respiratory protection.				
EXPLOSION POTENTIAL	N/A				

**SECTION V HEALTH, FIRST AID AND MEDICAL DATA**

PRIMARY ROUTES OF ENTRY	ACUTE AND CHRONIC HEALTH EFFECTS AND EFFECTS OF OVEREXPOSURE	FIRST AID AND MEDICAL INFORMATION
INHALATION Airborne dust during grinding	ACUTE- May cause coughing, shortness of breath CHRONIC- May effect breathing capacity	Remove to fresh air; obtain first-aid or medical assistance as needed
INGESTION Dust during grinding	Dust - no known adverse effects, ingestion not recommended	First aid or medical assistance as needed
SKIN During grinding	Not absorbed through skin - may cause abrasion in use	First aid or medical assistance as needed
EYE Airborne dust during grinding	Dust may irritate eyes	Wash with water; first aid or medical assistance as needed
OTHER HEALTH RISKS During grinding	On some materials, elevated sound levels may be created which may effect hearing	Obtain medical assistance as needed

## SECTION VI - CORROSIVITY AND REACTIVITY DATA

STABILITY: UNSTABLE  STABLE  POLYMERIZATION: MAY OCCUR  WILL NOT OCCUR

INCOMPATIBILITY (MATERIALS TO AVOID):  
**Strong oxidizing agents**

DECOMPOSITION PRODUCTS:

In use, dust and decomposing resin fumes are generated. In most cases, the material removed from work piece will be significantly greater than the coated abrasive product components.

CONDITIONS TO BE AVOIDED:

N/A

## SECTION VII - STORAGE HANDLING AND USE PROCEDURES

NORMAL STORAGE AND HANDLING:

Handle with adequate ventilation. See OSHA 29 CFR 1910.94 (ventilation) and OSHA 29 CFR 1910.1000 (air contaminants)

NORMAL USE:

Handle with adequate ventilation; See OSHA 29 CFR 1910.94 (ventilation), OSHA 29 CFR 1910.1000 (air contaminants), OSHA CFR 1910.213 (P) Sanding Machines & OSHA CFR 1910.243

STEPS TO BE TAKEN IN CASE OF LEAKS OR SPILLS:

Normal clean-up procedures.

TRANSPORTATION:

There are no chemicals included in final product that appear as a "hazardous material" as indicated in the Department of Transportation's document 49 CFR doc 172.101 App. A.

WASTE DISPOSAL METHOD:

Standard landfill methods consistent with applicable Federal, State, and local laws.

## SECTION VIII - PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE) As needed, approved dust respirator OSHA 24 CFR 1910.134

<b>X</b>	LOCAL	<b>Recommended</b>
	MECHANICAL (GENERAL)	<b>Recommended</b>
	OTHER	<b>NAIF</b>

PROTECTIVE GLOVES Recommended when in use.

EYE PROTECTION Recommended OSHA 29 CFR 1910.133 (Face and Eye Protection)

OTHER EQUIPMENT As needed, hearing protection OSHA 29 CFR 1910.215 (Hearing Protection)

See Sections VI, VII, and VIII

MEASURES TO BE TAKEN DURING REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT THAT HAS BEEN IN CONTACT

## SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

Slight formaldehyde or phenolic resin odor from binding system may be released during storage.

OTHER PRECAUTIONS

N/A

N/A = NOT APPLICABLE NAIF= NO APPLICABLE INFORMATION FOUND

### FOR COMPANY USE

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date hereof, however, Preferred Abrasives, Inc. makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.