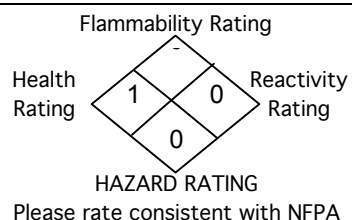


MERIT

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MATERIAL SAFETY DATA SHEET



SECTION I - NAME AND PRODUCT

MANUFACTURER'S Merit Abrasive Products, Inc.	CONTACT TECHNICAL DEPARTMENT
ADDRESS (CITY, STATE, AND ZIP) 2770 W. Washington St. Stephenville, TX 76401-3798	EMERGENCY TELEPHONE (800) 231- 4154
TRADE NAME, COMMON NAME, OR SPECIFICATION Mini & Micro-mini Grind-O-Flex, Interleaved (Flap Wheel), Zirc plus	APPROVED BY: Victor Rodriguez DATE: June 1, 2009
CHEMICAL FAMILY OR PRODUCT TYPE ANY Abrasive product, Mini & Micro-mini Grind-O-Flex, Interleaved (Flap Wheel), Zirc plus	

SECTION II - COMPOSITION

CHEMICAL NAME	%	COMMON NAME	REG* (Y/N)	CAS #	OSHA PERMISSIVE EXPOSURE LIMIT	ACGIH TLV	CARCIN- OGEN (Y/N)
ALUMINUM OXIDE	18-21	ALPHA ALUMINA	Y	1344-28-1	15mg/M3	5mg/M3	N
Al ₂ O ₃		(Abrasive Grain)			(Total Dust)	(Total Dust)	
ZIRCONIA OXIDE	8-10	ZIRCONIA(NZ, ZF, ZS)	N	1314-23-4	5mg/M3	5mg/M3	N
ZrO ₂					(as Zr)	(as Zr)	
Duroplastic Phenol or Urea Resin binder, & Inert Backing	57-60	Inert or Nuisance Dust	Y	N/A	15mg/M3	5mg/M3	N
Potassium Fluoroborate	4	Filler	N	NAIF	15mg/M3	5mg/M3	N
		(Treat as inert)					
Cured Epoxy Adhesive	5-10	Glue	N	N/A	N/A	N/A	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	Wheel-shaped tool with abrasive flaps.				

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):

N/A

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

X	LOCAL	Recommended
	MECHANICAL (GENERAL)	Recommended
	OTHER	NAIF

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, Merit Abrasive Products, 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.