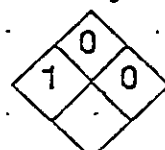


MET106

Flammability
RatingHealth
RatingReactivity
Rating

HAZARD RATING

Please rate consistent with NFPA Code

MATERIAL SAFETY DATA SHEET

SECTION I NAME AND PRODUCT

FACTURER'S NAME ORTON COMPANY	CONTACT RONALD L. KARBOWSKI
ESS (STREET, CITY, STATE AND ZIP CODE) NEW BOND STREET, WORCESTER, MA 01615-0008	EMERGENCY TELEPHONE NO. 508-795-2255
E NAME, COMMON NAME OR SPECIFICATION RESINOID BONDED GRINDING WHEELS	APPROVED BY <i>[Signature]</i> DATE 2/11/92
ICAL FAMILY OR PRODUCT TYPE ANY GRADE	

SECTION II COMPOSITION PER 29CFR 1910.1200 (G) (4)

CHEMICAL NAME	MAX %	COMMON NAME	REG* (Y/N)	CAS #	OSHA PERMISSIVE EXPOSURE LIMIT	ACGIH TLV	CARCINOGEN (Y/N)
Alumina	90	Alundum, Seeded Gel	Y	1344-28-1	10mg/m ³ (Total Dust)	10mg/m ³ (Total Dust)	N
Carbon Carbide	90	Crystolon	Y	409-21-2	10mg/m ³ (Total Dust)	10mg/m ³ (Total Dust)	N
Alumina	90	NZ, ZF, ZS	Y	**NAIF	5mg/m ³ (as Zirconium)	5mg/m ³ (as Zirconium)	N

grinding wheel may be comprised of 1 or more of the above abrasives. The chemicals listed below may be a part of the bond system.

Alumina (F)	3	N/A	Y	N/A	2.5mg/m ³	2.5mg/m ³	N
Calcium Oxide	3	Lime	Y	1305-78-8	5mg/m ³	2mg/m ³	N
Glass, Fibrous or Dust	10	Fiberglass	Y	**NAIF	**NAIF	10mg/m ³	N
Silicon Dioxide	<1	Crystalline Silica	Y	14808-60-7	0.1mg/m ³	0.1mg/m ³	Y

Materials are regulated by OSHA 29 CFR 1910.1200, Hazard Communication Standard, and/or the Massachusetts General Law Chapter 111F, Right to Know Regulations.

All grinding tests with wheels known to contain Crystalline Silica did not produce any detectable amount of respirable free Silica.

SECTION III PHYSICAL AND CHEMICAL DATA

MELTING POINT **NAIF	MELTING POINT **NAIF	SPECIFIC GRAVITY 2-4
VAPOR PRESSURE **NAIF	PERCENT VOLATILE BY VOL **NAIF	VAPOR DENSITY **NAIF
BOILING RATE **NAIF	SOLUBILITY IN WATER Slight	SOLUBILITY IN ALCOHOL **NAIF
SOLUBILITY IN OTHER SOLVENT **NAIF	APPEARANCE AND ODOR SOLID PRODUCT: MAY GIVE OFF ODOR IN USE...	

SECTION IV SPECIAL PRECAUTIONS

CAUTIONS TO BE TAKEN IN HANDLING AND STORAGE - NONE
OTHER PRECAUTIONS: **NAIF

SECTION V CORROSIVITY AND REACTIVITY DATA

STABILITY ☐ UNSTABLE ☒ STABLE	POLYMERIZATION ☐ MAY OCCUR ☒ WILL NOT OCCUR
COMPATIBILITY (MATERIALS TO AVOID)	
COMPOSITION PRODUCTS	
Use, dust and decomposing odors are generated. In most cases, the material removed from the workpiece will be significantly greater than the grinding wheel components. Coolants may produce other decomposition products.	
CONDITIONS TO BE AVOIDED **NAIF	
* NO APPLICABLE INFORMATION FOUND **NAIF - NOT APPLICABLE	

SECTION VI HEALTH, FIRST AID AND MEDICAL DATA

PRIMARY ROUTE(S) OF ENTRY	ACUTE AND CHRONIC HEALTH EFFECTS AND EFFECTS OF OVEREXPOSURE	FIRST AID AND MEDICAL INFORMATION
INHALATION (During Grinding)	ACUTE: POSSIBLE COUGH CHRONIC: MAY AFFECT BREATHING CAPACITY.	REMOVE TO FRESH AIR. ARTIFICIAL RESPIRATION AS NEEDED. OBTAIN MEDICAL ASSISTANCE.
INGESTION (During Grinding)	NO KNOWN ADVERSE EFFECTS, BUT INGESTION NOT RECOMMENDED.	OBTAIN MEDICAL ASSISTANCE.
SKIN (During Grinding) CONTACT & ABSORPTION	SOME MAY EXPERIENCE SKIN IRRITATION FROM DUST.	WASH AFFECTED AREAS WITH SOAP AND WATER. OBTAIN MEDICAL ASSISTANCE.
EYE (During Grinding)	DUST MAY IRRITATE EYES.	WASH WITH LARGE AMOUNTS OF WATER. OBTAIN FIRST AID AND MEDICAL ASSISTANCE, IF NEEDED.
OTHER POTENTIAL HEALTH RISKS (During Grinding)	GRINDING MAY CREATE ELEVATED SOUND LEVELS WHICH MAY AFFECT HEARING AND MAY AGGRAVATE PREEXISTING RESPIRATORY CONDITIONS.	OBTAIN MEDICAL ASSISTANCE. THERE IS LIMITED INFORMATION THAT CRYSTALLINE SILICA IS A CARCINOGEN.

SECTION VII STORAGE, HANDLING AND USE PROCEDURES

NORMAL STORAGE AND HANDLING SEE ANSI STANDARD B7.1.
NORMAL USE HANDLE WITH ADEQUATE VENTILATION. SEE OSHA 29CFR 1910.94 (VENTILATION) and 29CFR1910.1000 (AIR CONTAMINANTS)
STEPS TO BE TAKEN IN CASE OF LEAKS OR SPILLS. NORMAL CLEANUP PROCEDURES.
WASTE DISPOSAL METHOD STANDARD LANDFILL METHODS CONSISTENT WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS. PRODUCTS WITH LISTED FLOURIDES MAY HAVE SLIGHTLY SOLUBLE FLOURIDE SWARF.

SECTION VIII PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE) AS NEEDED. FOR APPROVED DUST RESPIRATORS SEE OSHA 29CFR 1910.134.	
VENTILATION	LOCAL RECOMMENDED
	MECHANICAL (GENERAL) RECOMMENDED
	OTHER **NAIF
PROTECTIVE GLOVES	RECOMMENDED
EYE PROTECTION	RECOMMENDED SEE OSHA 29CFR 1910.133
OTHER EQUIPMENT	AS NEEDED HEARING PROTECTION SEE OSHA 29CFR 1910.95 (HEARING PROTECTION)
MEASURES TO BE TAKEN DURING REPAIR AND MAINTENANCE OF CONTAMINATED EQUIPMENT THAT HAS BEEN IN CONTACT WITH THIS MATERIAL SEE SECTION VII & VIII	

SECTION IX FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	**NAIF	METHOD USED	***N/A	FLAMMABLE LIMITS	LEL N/A	UEL ***N/A
EXTINGUISHING MEDIA	USE WATER					
SPECIAL FIRE FIGHTING PROCEDURES	NONE					
EXPLOSION POTENTIAL	**NAIF					

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