

**MATERIAL SAFETY DATA SHEET**

PRODUCT IDENTITY / TRADE NAME: VITRIFIED GRINDING WHEELS, INCLUDING SURFACE GRINDING WHEELS, BENCH GRINDING WHEELS (TYPE 1), TOOL AND CUTTER WHEELS AND MOUNTED POINTS.

MANUFACTURER: UNITED ABRASIVES INC.  
ADDRESS: P.O. BOX 75, ROUTE 66, WILLIMANTIC, CT 06226  
INFORMATION PHONE NUMBER: 203-456-7131  
EMERGENCY PHONE NUMBER: 203-456-7131

**INGREDIENTS:**

<u>HAZARDOUS COMPONENTS</u>	<u>CAS NUMBER</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>%</u>
ALUMINUM OXIDE	1344-28-1	10 MG/M3 *	10 MG/M3 *	80-95
AND/OR SILICONE CARBIDE	409-21-2	10 MG/M3 *	10 MG/M3 *	80-95
CURED PHENOLIC RESIN	N/AV	NONE EST.	NONE EST.	5-10
AND/OR CLAY	N/AV	10 MG/M3 *	10 MG/M3 *	0-5
AND/OR FELDSPAR	N/AV	10 MG/M3	10 MG/M3	0-5
AND/OR FLINT	N/AV	10 MG/M3 *	10 MG/M3 *	0-5
AND/OR SODIUM SILICATE	1344-09-8	10 MG/M3 *	10 MG/M3 *	0-5

\* INERT OR NUISANCE DUST - TOTAL DUST

<u>BOILING POINT:</u> N/A	<u>VAPOR PRESSURE</u> (mm Hg) N/A
<u>SOLUBILITY IN WATER:</u> N/A	<u>VAPOR DENSITY</u> (AIR = 1) N/A
<u>SPECIFIC GRAVITY:</u> N/A	<u>EVAPORATION RATE</u> N/A
<u>COEFFICIENT OF WATER/OIL:</u> N/A	(ETHER = 1)

APPEARANCE AND ODOR: SOLID WHEEL, ODORLESS  
ODOR THRESHOLD: N/A

**FIRE AND EXPLOSION DATA:**

FLASH POINT: N/A                      FLAMMABLE LIMITS: N/A

AUTOIGNITION TEMPERATURE: NONE

EXTINGUISHING MEDIA: ANY MEDIA APPROPRIATE FOR SURROUNDING FIRE

SPECIAL FIREFIGHTING PROCEDURES: NONE

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE FROM THIS PRODUCT, HOWEVER, CONSIDERATION MUST BE GIVEN TO THE POTENTIAL FIRE/EXPLOSION HAZARD FROM THE BASE MATERIAL BEING PROCESSED. MANY MATERIALS CREATE FLAMMABLE/EXPLOSIVE DUSTS OR TURNINGS WHEN MACHINED OR GROUND.

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**REACTIVITY DATA:**

STABILITY, CONDITIONS TO AVOID: STABLE

REACTIVITY/INCOMPATIBILITY (MATERIALS OR CONDITIONS TO AVOID): N/A

HAZARDOUS DECOMPOSITION PRODUCTS: DUST FROM GRINDING COULD CONTAIN INGREDIENTS AS LISTED IN SECTION 2 AND OTHER POTENTIALLY MORE HAZARDOUS COMPONENTS OF THE BASE MATERIAL BEING GROUND OR COATINGS APPLIED TO THE BASE MATERIAL.

SPECIAL STORAGE PRECAUTIONS: STORE IN ACCORDANCE WITH ANSI B7.1

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**HEALTH HAZARD DATA**

ACUTE EFFECTS OF OVEREXPOSURE: RESPIRATORY AND EYE IRRITATION

CHRONIC EFFECTS OF OVEREXPOSURE: LONG-TERM EXCESSIVE EXPOSURE MAY RESULT IN A CHRONIC PULMONARY CONDITION (FIBROSIS) WHICH IS AGGRAVATED BY SMOKING. ELEVATED NOISE LEVELS MAY AFFECT HEARING.

SIGNS AND SYMPTOMS OF EXPOSURE: COUGHING, SHORTNESS OF BREATH, RESPIRATORY IRRITATION, DIMINISHED BREATHING CAPACITY. A GREATER HAZARD IN MOST CASES, HOWEVER, IS THE EXPOSURE TO DUST/FUMES FROM THE MATERIAL OR PAINT/COATINGS BEING GROUND. A MAJORITY OF THE DUST GENERATED DURING GRINDING IS FROM THE BASE MATERIAL BEING GROUND AND THE POTENTIAL HAZARD FROM THIS EXPOSURE MUST BE EVALUATED.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: RESPIRATORY DISEASE

PRIMARY ROUTE(S) OF EXPOSURE: INHALATION, EYES

TOXICITY DATA: NO LD50 OR LC50 DATA IS AVAILABLE FOR THIS MATERIAL OR FOR ANY OF THE COMPONENTS.

CHEMICAL LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN: OSHA: NO  
NATIONAL TOXICOLOGY PROGRAM: NO IARC MONOGRAPHS: NO

IRRITANCY: MECHANICAL IRRITANT ONLY.

SENSITIZATION: THIS MIXTURE HAS NOT BEEN TESTED AS A WHOLE. NONE OF THE COMPONENTS HAVE BEEN REPORTED TO CAUSE SENSITIZATION IN ANIMALS OR HUMANS.

REPRODUCTIVE TOXICITY: THIS MIXTURE HAS NOT BEEN TESTED AS A WHOLE. NONE OF THE COMPONENTS HAVE BEEN REPORTED TO CAUSE ADVERSE REPRODUCTIVE EFFECTS.

MUTAGENICITY: THIS MIXTURE HAS NOT BEEN TESTED AS A WHOLE. NONE OF THE COMPONENTS HAVE BEEN REPORTED TO CAUSE TERATOGENIC EFFECTS.

HEALTH HAZARD DATA CONTINUED:

MUTAGENICITY: THIS MIXTURE HAS NOT BEEN TESTED AS A WHOLE. NONE OF THE COMPONENTS HAVE BEEN FOUND TO BE MUTAGENIC.

SYNERGISTIC EFFECTS: ANY MATERIAL WHICH MAY CAUSE LUNG DAMAGE OR FIBROSIS OF THE LUNGS MAY ACT IN AN ADDITIVE MANNER TO INCREASE EXPOSURE RISK.

FIRST AID:

INHALATION - REMOVE TO FRESH AIR, OBTAIN FIRST AID & MEDICAL ASSISTANCE.

EYES - DUST MAY IRRITATE EYES, FLUSH WITH LARGE AMOUNTS OF WATER, OBTAIN MEDICAL ATTENTION FOR IRRITATION OR FOREIGN BODY IN THE EYE.

SKIN - WASH DUST FROM SKIN.

INGESTION - THIS IS AN UNLIKELY ROUTE OF EXPOSURE BUT SHOULD GRINDING DUST BE SWALLOWED, GET MEDICAL ADVICE.

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SAFE HANDLING PROCEDURES

HYGIENIC PRACTICES: WASH WELL WITH SOAP & WATER BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES.

PILL HANDLING/CLEAN-UP: TREAT AS INERT DRY SOLID, SWEEP-UP OR VACUUM IN SUCH A MANNER AS TO MINIMIZE DUST GENERATION.

WASTE DISPOSAL: STANDARD LANDFILL METHODS IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

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CONTROL MEASURES

RECOMMENDED ENGINEERING CONTROLS (VENTILATION): LOCAL EXHAUST AS NEEDED TO KEEP DUST CONCENTRATION BELOW ALL APPLICABLE TLV'S FOR ALL POSSIBLE CONTAMINANTS.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION: NIOSH APPROVED DUST RESPIRATORS, OR SUPPLIED AIR DEPENDING ON CONTAMINANT AND CONCENTRATION. GET PROFESSIONAL ADVICE FOR SELECTION

GLOVES: CLOTH OR LEATHER

EYE PROTECTION: WEAR SAFETY GOGGLES OR FACE SHIELD

OTHER: HEARING PROTECTION MAY BE REQUIRED IN GRINDING OPERATIONS

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SPECIAL SHIPPING INFORMATION: NONE

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**ENVIRONMENTAL DATA**

SARA 311/312

THIS PRODUCT IS HAZARDOUS ACCORDING TO OSHA CRITERIA AND THEREFORE REPORTABLE UNDER SARA 311/312 IF REPORTING THRESHOLDS ARE EXCEEDED. CATEGORY -CHRONIC HEALTH

SARA 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 (SARA 313-TOXIC CHEMICAL RELEASE REPORTING):  
NONE

THIS PRODUCT DOES NOT CONTAIN CHEMICALS REGULATED UNDER CALIFORNIA PROPOSITION 65.

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DATE THIS REVISION: 6/15/90