Sticks & Stones Unlimited, Inc. Material Safety Data Sheet

DATE PRINTED: January 6, 2006 MSDS #: VIT-1 Vitrified Bonded Abrasive Products

Section 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME

Vitrified Bonded Abrasive Products

TRADE NAME

Aluminum Oxide & Silicon Carbide

MANUFACTURER

Sticks & Stones Unlimited, Inc. 3225 Ave. E East Arlington, TX 76011 817-695-1000

REVISION DATE

1/19/2005

MSDS PRINT FORMAT

NUSA

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE DESCRIPTION	PERCENT	CAS#
Aluminum Oxide, Non-fibrous Chrome oxide(*) Cobalt Aluminate (*) Amorphous Silica, Fused Silicon Carbide Sulfur OTHER	30.000- 95.000 1.000- 2.000 0.100- 2.000 2.000- 30.000 30.000- 95.000 15.000- 40.000	1344-28-1 1308-38-9 1345-16-0 60676-86-0 409-21-2 7704-34-9

(*) This substance is regulated under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and the Canadian National Pollution Reduction Initiative (NPRI). The grinding wheel may be comprised of only some of the above.

SECTION 3. HAZARDS IDENTIFICATION

INHALATION ACUTE EXPOSURE EFFECTS

Dust may be slightly irritating to eyes and respiratory tract at high concentrations.

INHALATION CHRONIC EXPOSURE EFFECTS

May affect breathing capacity. For products containing Amorphous Silica, Fused, there is limited evidence in animals that excessive and prolonged exposure to this chemical may cause pulmonary fibrosis The chrome and Cobalt are fused into the glass matrix and are expected to pose little risk.

EYE CONTACT ACUTE EXPOSURE EFFECTS

Dust may irritate eyes.

SKIN CONTACT ACUTE EXPOSURE EFFECTS

Some may experience skin irritation from dust.

INGESTION ACUTE EXPOSURE EFFECTS

No known adverse effects, but ingestion not recommended.

SECTION 4. FIRST AID MEASURES

INHALATION

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately.

SKIN CONTACT

Wash affected areas with soap and water. Obtain medical assistance. EYE CONTACT

Wash with large amounts of water. Obtain first aid and medical assistance, if needed.

INGESTION

Call poison control center, hospital emergency room or physician immediately.

SECTION 5. FIRE FIGHTING MEASURES

FIRE FIGHTING PROCEDURES
Not Applicable
HAZARDOUS PRODUCTS/COMBUSTION
None.
HAZARD RATING SOURCE
NFPA
HEALTH
1
FLAMMABILITY
0
REACTIVITY

SECTION 6. ACCIDENTAL RELEASE MEASURES

CLEAN-UP

OTHER

Follow normal clean up procedures.

SECTION 7. HANDLING AND STORAGE

HANDLING

Always HANDLE AND STORE wheels in a CAREFUL manner.

Always VISUALLY INSPECT all wheels before mounting.

Always CHECK MACHINE SPEED against the established maximum safe operating speed MARKED ON THE WHEEL.

Always CHECK MOUNTING FLANGES for equal and correct diameter.

Always USE MOUNTING BLOTTERS.

Always be sure WORK REST is properly adjusted.

Always USE A SAFETY GUARD covering at least one-half of the grinding wheel.

Always allow NEWLY MOUNTED WHEELS to run at operating speed, with guard in place, for at least one minute before grinding.

Always TURN OFF COOLANT before stopping wheel to avoid creating an $\operatorname{out-of-balance}$ wheel

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION PROTECTION
Handle with adequate ventilation. See OSHA 29 CFR 1910.94
(ventilation) and 29 CFR 1910.1000 (Air contaminants).

RESPIRATORY PROTECTION

Respirators are required when airborne contaminant levels exceed the TLV(s).

EYE PROTECTION

Always WEAR SAFETY GLASSES or some type of eye protection when grinding.

OTHER PROTECTION

Use of this product may create elevated sound levels. Hearing protection should be worn where required (see OSHA 29 CFR 1910.134 and other applicable regulations).

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR

Solid article. Odorless.

SECTION 10. STABILITY AND REACTIVITY

INCOMPATIBILITIES

Avoid acids of all types with a pH < 4.0.

DECOMPOSITION

In use, dusts and decomposing odors may be 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.

For products containing phenol and formaldehyde resin, thermal decomposition may produce trace amounts of phenol and formaldehyde.

For products containing inorganic fluorides, thermal decomposition may produce trace amounts of fluorides.

SECTION 11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY

Silica, Amorphous, Fused - IARC-3, NIOSH-X Cobalt-IARC 2B, Chrome (III) - IARC-3 LD50/LC50 Values are not appropriate or available.

SECTION 12. ECOLOGICAL INFORMATION

CHEMICAL FATE

Vitrified products do not appreciably decay.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Use standard landfill methods consistent with applicable Federal, State, Provincial and local laws.

Products with listed flourides may have slightly soluble flouride swarf.

RECYCLING PROGRAM - the Company has developed a grinding wheel recycling program. If you are interested in returning your stubs, information can be obtained by dialing Customer Service.

SECTION 14. TRANSPORT INFORMATION

HAZARD CLASS

This product is not hazardous as defined by the Department of Transportation. (USA) This product is "Not Regulated" under the Transportation of Dangerous Goods Act. (CAN)

SECTION 15. REGULATORY INFORMATION

EXPOSURE LIMITS/REGULATORY INFORMATION

SUBSTANCE DESCRIPTION	UNITS	OSHA	ACGIH	MOL	
Aluminum Oxide, Non-fibrous					
Chrome oxide(*)	MG/M3	15.0000	10.0000	10.0000	
Cobalt Aluminate (*) Amorphous Silica, Fused		0.0000	0.0000	0.0000	
	MG/M3	0.0500	0.0200	0.0000	
	MG/M3	0.1000	0.1000	0.0000	
Silicon Carbide	MG/M3	10.0000	10.0000	10.0000	
Sulfur	MG/M3	0.0000	0.0000	0.0000	
	MG/M3	0.0000	0.0000	0.0000	

LEGEND:

EXPOSURE LIMIT DESCRIPTIONS CA PROP 65 Not Applicable TSCA Section 8(b) - Inventory Status

All components of this product are registered under the regulations of the Toxic Substance Control Act.

DOMESTIC SUBSTANCE LIST

All components of this product are found on the Domestic Substance List.

SECTION 16. OTHER INFORMATION

DISCLAIMER

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date hereof; however, the Company 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.

KEY TO ABBREVIATIONS:

EQ=EQual AP=APproximately

LT=Less Than TR=TRace

GT=Greater Than ND=No Data available