

# MATERIAL SAFETY DATA SHEET

DATE PRINTED: MAY 09, 2005

MSDS NO. VIT000

OUTBOUND

Vitrified Bonded Abrasive Products



Norton Company

## SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

### PRODUCT NAME

Vitrified Bonded Abrasive Products

### TRADE NAME

Alundum, Crystolon, Seeded Gel

### MANUFACTURER(4)

Saint-Gobain Abrasives, Inc.

One New Bond Street

Worcester, MA, 01606

(508) 795-5000

### REVISION DATE

1/19/2005

### MSDS PRINT FORMAT

NUSA

## SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

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

### OTHER

(\*)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  
0  
OTHER

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

CLEAN-UP  
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 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

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EXPOSURE LIMITS/REGULATORY INFORMATION

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

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.

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KEY TO ABBREVIATIONS: