

**MATERIAL SAFETY DATA SHEET****BDX METAL**

DATE PRINTED: APR 24, 2002  
 MSDS NO. ALRESIN001 OUTBOUND  
 Aluminum Oxide Resin Grinding Wheel

**NORTON****SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION**

PRODUCT NAME  
 Aluminum Oxide Resin Grinding Wheel  
 MANUFACTURER(4)  
 Saint-Gobain Abrasives, Inc.  
 1 New Bond St.  
 Worcester, MA, 01615  
 (508) 795-5000  
 EMERGENCY CONTACT  
 EMERGENCY TELEPHONE #1  
 (508)-795-5000  
 REVISION DATE  
 4/24/2002  
 MSDS PRINT FORMAT  
 AUTOUSA

**SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS**

SUBSTANCE DESCRIPTION	PERCENT	CAS#
Aluminum Oxide, Non-fibrous	90.000- 95.000	1344-28-1
Cured PhenolFormaldehyde Resin	3.000- 6.000	9003-35-4
Fiberglass	1.000- 3.000	65997-17-3
Iron Disulfide	1.000- 3.000	12068-85-8
OTHER		
Not Applicable		

**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  
 Chronic: May affect breathing capacity.  
 For products containing phenol/formaldehyde resin, dust generated from intended use may contain trace amounts of phenol and formaldehyde which under excessive exposure may cause skin sensitization and airway obstruction.  
 For products containing inorganic fluorides, excessive exposure to inorganic fluorides have been shown to increase bone density.  
 SKIN CONTACT ACUTE EXPOSURE EFFECTS  
 Some may experience skin irritation from dust.  
 EYE CONTACT ACUTE EXPOSURE EFFECTS  
 Dust may irritate eyes.  
 INGESTION ACUTE EXPOSURE EFFECTS  
 No known adverse effects, but ingestion not recommended.  
 MEDICAL CONDITIONS AGGRAVATED

**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

07/10/02

Not Applicable  
 HAZARDOUS PRODUCTS/COMBUSTION  
 None.  
 FIRE AND EXPLOSION HAZARDS  
 Not Applicable  
 EXTINGUISHING METHOD  
 Not Applicable  
 FLASH POINT  
                   F                  C  NA  
 FLASH METHOD  
 NA  
 UPPER EXPLOSION LIMIT  
                   NA  
 LOWER EXPLOSION LIMIT  
                   NA  
 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.

STORAGE  
 GENERAL COMMENTS

### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

VENTILATION PROTECTION  
 Recommend using local exhaust ventilation when general ventilation is not keeping the airborne concentration below the TLV.

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

SKIN PROTECTION

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).

SUBSTANCE DESCRIPTION	EXPOSURE LIMITS/REGULATORY INFORMATION			
	UNITS	OSHA	ACGIH	MOL
Aluminum Oxide, Non-fibrous	MG/M3	15.0000	10.0000	10.0000
Cured PhenolFormaldehyde Resin	PPM	0.0000	0.0000	0.0000
Fiberglass				

Iron Disulfide	FBR/CC	1.0000	0.0000	0.0000
	MG/M3	10.0000	10.0000	10.0000

## LEGEND:

EXPOSURE LIMIT DESCRIPTIONS

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

## APPEARANCE &amp; ODOR

Solid article. Odorless.

## SPECIFIC GRAVITY

NA

## VAPOR PRESSURE (mm Hg)

NA

## VAPOR DENSITY (Air = 1.0)

NA

## EVAPORATION RATE

NA

## VOLATILE %

NA

## SOLUBILITY IN WATER

NA

## BOILING POINT

F

C

**SECTION 10. STABILITY AND REACTIVITY**

## INCOMPATIBILITIES

Avoid acids of all types with a pH &lt; 4.0.

## DECOMPOSITION

In use, dust and decomposing odors may be generated. In most cases, the material removed from the workplace 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.

## POLYMERIZATION

## CONDITIONS TO AVOID

## STABILITY

Stable.

**SECTION 11. TOXICOLOGICAL INFORMATION**

## INHALATION EFFECTS

## DERMAL EFFECTS

## INGESTION EFFECTS

**SECTION 12. ECOLOGICAL INFORMATION**

## CHEMICAL FATE

Resin bonded materials demonstrate similar degradation rates as Phenolic plastics.

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 fluorides may have slightly soluble fluoride 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**

## DOT SHIPPING NAME

**SECTION 15. OTHER INFORMATION**

## CARCINOGENICITY

This product or its ingredients have not been identified as a carcinogen or probable carcinogen by NTP, IARC monographs, or OSHA. 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.

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:

EQ=Equal

LT=Less Than

GT=Greater Than

AP=Approximately

TR=Trace

ND=No Data available

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