

MATERIAL SAFETY DATA SHEET



DATE PRINTED: MAR 07, 2001
MSDS NO. RESIN000 OUTBOUND
Resin Bonded Abrasive Products

Norton Company

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME
Resin Bonded Abrasive Products : SLEEVES, RESIN BOND WITH ALUMINUM OXIDE
TRADE NAME
MANUFACTURER(4)
Norton Company, 1 New Bond St.
Worcester, MA, 01615
(508) 795-5000
REVISION DATE
2/08/2000
MSDS PRINT FORMAT
NUSA

Freeman logo and Freeman Mfg. & Supply Co. address: 1101 MOORE ROAD AVON, OHIO 44011-1011 (800) 321-8511

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Table with 3 columns: SUBSTANCE DESCRIPTION, PERCENT, CAS#. Rows include Aluminum Oxide, Calcium Oxide, Carbon Black, Cured PhenolFormaldehyde Resin, Fiberglass, Inorganic Fluorides, Manganese Compounds, Crystalline Silica, Quartz, Silicon Carbide, Sodium Silicate, Sulfates & Sulfides, Zinc Compound, Zirconium Oxide.

\*\* SUBSTANCE IS A COMPOUND AND/OR MIXTURE

OTHER
(0) Actual grinding tests with wheels known to contain Crystalline Silica did not produce any detectable amount of respirable free Crystalline Silica. The grinding wheel may be comprised of only some of the above. (\*) 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 OSHA exposure limit represented in section 15 is for respirable dust and assumed to be worst case exposure to 100% crystalline silica; 10 mg/m3/(%silica+2)

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 phneol/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,

9-2  
excessive exposure to inorganic fluorides have been shown to increase bone density.

#### 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, 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.

**SECTION 11. TOXICOLOGICAL INFORMATION**

**CARCINOGENICITY**

Fiberglass contained in wheels have fiber diameters greater than 10 um, therefore considered non-respirable.

Crystalline Silica, Quartz - IARC-1, NIOSH-X, NTP-R.

**LD50/LC50**

Values are not appropriate or available.

**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**

**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

SECTION 15. REGULATORY INFORMATION

| SUBSTANCE DESCRIPTION          | EXPOSURE LIMITS/REGULATORY INFORMATION |         |         |         |
|--------------------------------|--|---------|---------|---------|
|                                | UNITS                                  | OSHA    | ACGIH   | MOL     |
| Aluminum Oxide, Non-fibrous    | MG/M3                                  | 15.0000 | 10.0000 | 10.0000 |
| Calcium Oxide                  | MG/M3                                  | 5.0000  | 2.0000  | 0.0000  |
| Carbon Black                   | MG/M3                                  | 3.5000  | 3.5000  | 0.0000  |
| Cured PhenolFormaldehyde Resin | PPM                                    | 0.0000  | 0.0000  | 0.0000  |
| Fiberglass                     | FBR/CC                                 | 1.0000  | 0.0000  | 0.0000  |
| Inorganic Fluorides            | MG/M3                                  | 2.5000  | 2.5000  | 2.5000  |
| Manganese Compounds(+)         |  | 0.0000  | 0.0000  | 0.0000  |
| Crystalline Silica, Quartz     | MG/M3                                  | 0.1000  | 0.1000  | 0.0000  |
| Silicon Carbide                | MG/M3                                  | 10.0000 | 10.0000 | 10.0000 |
| Sodium Silicate                | MG/M3                                  | 15.0000 | 0.0000  | 0.0000  |
| Sulfates & Sulfides            | MG/M3                                  | 0.0000  | 0.0000  | 0.0000  |
| Zinc Compound(+)               |  | 0.0000  | 0.0000  | 0.0000  |
| Zirconium Oxide                | MG/M3                                  | 5.0000  | 5.0000  | 5.0000  |

## LEGEND:

## EXPOSURE LIMIT DESCRIPTIONS

## CA PROP 65

This product contains chemicals, Crystalline Silica, known to the State of California, to cause cancer.

## 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

## KEY TO ABBREVIATIONS:

EQ=Equal

LT=Less Than

GT=Greater Than

AP=Approximately

TR=Trace

ND=No Data available

## 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.