

**MATERIAL SAFETY DATA SHEET**

 <b>for superior quality and service</b>
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PART#

DATE PRINTED: NOV 01, 2001

MSDS NO. ALVIT001

OUTBOUND

Aluminum Oxide Vitrified Product

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

## PRODUCT NAME

Aluminum Oxide Vitrified Product

## TRADE NAME

Alundum

## MANUFACTURER(4)

Norton Company, 1 New Bond St.

Worcester, MA, 01615

(508) 795-5000

## REVISION DATE

3/01/2001

## MSDS PRINT FORMAT

NUSA

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

SUBSTANCE DESCRIPTION	PERCENT	CAS#
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Aluminum Oxide, Non-fibrous	30.000- 97.000	1344-28-1
Amorphous Silica, Fused	2.000- 35.000	60676-86-0
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

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.

## 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

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).

## 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 &amp; 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

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 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 Goods Act. (CAN)

### **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
Amorphous Silica, Fused	MG/M3	0.1000	0.1000	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**

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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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**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.