

**MATERIAL SAFETY DATA SHEET  
(MSDS)  
Microgrit WCA (Aluminum Oxide, Alumina)**

**Revision: January 2, 2008**

**Date Issued: January 2008**

**1. Identification of the Substance/Preparation and Company/Undertaking**

**Substance or preparation trade name:** Microgrit WCA, WCA EG, Microgrit MAL, Microgrit MAV, Aluminum Oxide  $\text{Al}_2\text{O}_3$ . **Chemical Family:** Inert Oxide  $\text{Al}_2\text{O}_3$ .

Company/undertaking name, address and normal telephone number:

Micro Abrasives Corporation                      Tel: (413) 562-3641  
720 Southampton Road  
P.O. Box 669    Fax: (413) 562-7409  
Westfield, MA 01085

Emergency telephone number:                      (800) 426-6046

**2. Composition /Information on Ingredients**

Aluminum Oxide, Alumina CAS number: 1344-28-1  
EINECS Number: 2156916

**3. Hazards Identification**

The most important hazards are:

Alumina is a low health risk by inhalation and should be treated as a nuisance dust as specified by the American Conference of Governmental Industrial Hygienists (ACGIH). See Section 8. "Exposure Controls."

HMIS

Health-----1  
Flammability----- 0  
Reactivity----- 0  
Personal Protection----- X

**4. First Aid Measures**

Summary of first aid is as follows:

**Inhalation:** Remove to fresh air. If breathing is labored or stopped, give artificial respiration. Get immediate medical attention.

**Skin contact:** Normally no reaction. If irritation develops, wash with soap and water for at least 15 minutes. Consult a physician.

**Eye contact:** Flush eyes with plenty of water for at least 15 minutes. Consult a physician if irritation persists.

**Ingestion:** If swallowed, rinse out mouth and dilute with large amounts of water. Do not induce vomiting. Consult a physician immediately.

## 5. Fire-Fighting Measures

Suitable extinguishing media: Use extinguishing agent applicable to surrounding fire.

Flash Point: None

Flammable Limits: None

Auto-Ignition Temperature: N/A

Hazardous Combustion products: None

Required special protective equipment for fire fighters: None for aluminum oxide. Base protective apparatus on surrounding fire.

## 6. Accidental Release Measures

Methods for cleaning: Small/Large Spill - Clean up using dry mechanical procedures, avoid excessive dusting.

Where appropriate, refer to information under headings "Exposure Controls" and "Disposal Considerations."

## 7. Handling and Storage

Handling: No special precautions.

Storage: Keep material dry. Material will lump together softly with moisture. After drying lumps may become hard.

Shelf Life: Indeterminate

## 8. Exposure Controls

<u>Material</u>	<u>OSHA PEL (mg/m<sup>3</sup>)</u>	<u>%</u>	<u>TLV (Units)</u>
A1 <sub>2</sub> O <sub>3</sub> (Alpha Alumina)	10.5 (resp.)	+99	10mg/m <sub>3</sub>
Major Impurities (Fe <sub>2</sub> O <sub>3</sub> , SiO <sub>2</sub> , Na <sub>2</sub> O)	Total equals	<1	N/A

HSE EH 40 2002 Aluminum Oxide: Total inhalable dust long term exposure limit (8 hr. TWA) 10mg/m<sup>3</sup>.

HSE EH 40 2002 Aluminum Oxide: Respirable dust short term exposure limit (15 minute reference period) 4mg/m<sup>3</sup>.

Respiratory protection: NIOSH approved dust respirator where exposure limit is or may be exceeded. See OSHA 29CFR1910.134

Skin protection: None required. Gloves recommended for long-term handling to help prevent drying of the skin.

Eye protection: Safety glasses recommended. See OSHA 29CFR1910.133

## 9. Physical and Chemical Properties

Appearance: White in color, crystalline powder  
Odor: none  
ph in water: 50gm/40ml - 20°C 8-10 SU  
Boiling point/boiling point range: N/A  
Melting point/melting point range: 3727°F (2053°C)  
Flashpoint (°C) show closed or open cup: none  
Flammability (gas/solid): non-flammable  
Autoflammability: N/A  
Explosive properties: N/A  
Vapor pressure: N/A  
Relative density: Loose bulk 50-80 lb/ft<sub>3</sub> (.8 - 1.3 gm/cm<sup>3</sup>)  
Solubility: very slightly soluble in acids and alkalies  
Solubility in water and organic solvents: insoluble  
Specific Gravity: 3.9-4.0

## 10. Stability and Reactivity

Conditions to avoid: A slight rise in temperature may result from contact with water.  
Incompatibility: None  
Hazardous decomposition products: None  
Hazardous Polymerization: None

## 11. Toxicological Information

Acute Toxicity  
Skin Contact: no irritant effect  
Eye Contact: no irritant effect  
No LD<sub>50</sub> or LC<sub>50</sub> found for oral, dermal, or inhalation routes of administration.

When used and handled to specification, the product does not have any harmful effects according to our experience and the information provided to us.

The material is not subject to classification according to EC lists in the last version and the information we have.

## 12. Ecological Information

Ecotoxicological/chemical fate information: Non Hazardous.  
Note: for preparations, indicate data relevant to constituent substances classified as dangerous for the environment.

## 13. Disposal Considerations

Collect in containers, bags, or covered dumpster boxes. If reuse or recycling is not possible, material may be disposed of at a sanitary landfill after consulting with the operator and the pertinent authorities and following procedures of the necessary technical regulations.

Waste Disposal Key Number: 513 05.

Waste Packaging: See above Disposal Considerations.

RCRA Status: not regulated

#### **14. Transport Information**

Special carriage precautions in carriage (on-site or externally): N/A

U.S.A. DOT: Not regulated. Enter the proper freight classification on the shipping paperwork. "MSDS Number" and product name for shipping purposes.

Canadian TDG Hazard Class of PIN: not regulated

Not dangerous according to the above specifications.

#### **15. Regulatory Information**

Supply label information: (see appropriate part of labelling decision record)

TSCA status components of this product are listed in the TSCA inventory Cercla Reportable

Quantity: None

SARA Title III:

Section 302 Extremely Hazardous Substances: None

Section 311/312 Hazardous Categories: none

Section 313 Toxic Chemicals: None

International Regulations Canadian Domestic Substances List: component of this product are listed on the Canadian DSL.

European Community: The material is not subject to classification according to EC lists and other sources of literature known to us. Water Hazard Class: 0 (internal assessment) generally not hazardous in water.

Note: Actual label may not be as above if product was supplied some time previously or labeling is in transaction period.

Applicable EU provisions and associated UK legislation:

Note: This data sheet does not constitute a user's assessment of workplace risk as required by HSW Act, COSHH, Management Of Health And Safety At Work Regulations,

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or other health and safety legislation.

Please use normal industrial precautions for a safe and healthy workplace. All information used herein was valid at the time of use and to the best of our knowledge.

## 16. Other Information

Further information sources: References - American Industrial Hygiene Association (AIHA) Hygienic Guide Series, June 1978 Edition. U.S. Dept. of Health and Human Services, NIOSH: Registry of Toxic Effects of Chemical Substances, 1985-86 Edition. Sax, N. Irving: Dangerous Properties of Industrial Materials, Van Nostrand Reinhold Co., Inc., 1984. American Conference of Governmental Industrial Hygienists, Inc. (ACGIH), Documentation of the Threshold Limit Values and biological Exposures Indices, Sixth Edition, 1992.

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The data contained in this Safety Data Sheet has been supplied as required by the Chemicals (Hazard Identification and Packaging) Regulations 1993, as amended, for the purpose of protecting the health and safety of industrial and commercial users who are deemed capable of understanding and acting on the information provided. Please ensure that it is passed to the appropriate person(s) in your company, who are capable of acting on the information.