

# Material Safety Data Sheet

## WCA B, WCA T - Aluminum Oxide with Suspension Treatment

### 1. Product and company identification

<b>Common name</b>	: WCA B, WCA T - Aluminum Oxide with Suspension Treatment
<b>Material uses</b>	: Lapping.
<b>Supplier/Manufacturer</b>	: Micro Abrasives Corporation 720 Southampton Road P.O. Box 669 Westfield, MA 01085 Tel: (413) 562-3641 Fax: (413) 562-6046
<b>In case of emergency</b>	: 1-866-213-4266

### 2. Hazards identification

<b>Physical state</b>	: Solid. [Crystalline powder.]
<b>Odor</b>	: Odorless.
<b>Color</b>	: Off-white to tan.
<b>Hazard status</b>	: This material is classified hazardous under OSHA regulations in the United States, the WHMIS Controlled Product Regulation in Canada and the NOM-018-STPS-2000 in Mexico.
<b>Emergency overview</b>	: WARNING! MAY CAUSE ALLERGIC RESPIRATORY REACTION. MAY CAUSE EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. Avoid exposure - obtain special instructions before use. Do not breathe dust. Avoid contact with eyes, skin and clothing. Contains material that can cause target organ damage. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
<b>Potential acute health effects</b>	
<b>Eyes</b>	: Slightly irritating to the eyes.
<b>Skin</b>	: Slightly irritating to the skin.
<b>Inhalation</b>	: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. May cause sensitization by inhalation.
<b>Ingestion</b>	: No known significant effects or critical hazards.
<b>Potential chronic health effects</b>	: CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for humans or animals.) by ACGIH [Aluminum Oxide]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [Kaolin]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.
<b>Medical conditions aggravated by over-exposure</b>	: Pre-existing respiratory disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
<b>See toxicological information (section 11)</b>	

### 3 . Composition/information on ingredients

#### United States

Name	CAS number	%
Aluminum Oxide	1344-28-1	60 - 100
Kaolin	1332-58-7	1 - 5
Gypsum	13397-24-5	1 - 5
Aluminum hydroxide	21645-51-2	1 - 5

#### Canada

Name	CAS number	%
Aluminum Oxide	1344-28-1	60 - 100
Kaolin	1332-58-7	1 - 5
Gypsum	13397-24-5	1 - 5
Aluminum hydroxide	21645-51-2	1 - 5

#### Mexico

Name	UN number	IDLH	Classification				CAS number	%
			H	F	R	Special		
Aluminum Oxide	Not regulated.	-	0	0	0		1344-28-1	60 - 100
Kaolin	Not regulated.	-	2	0	0		1332-58-7	1 - 5
Gypsum	Not regulated.	-	0	1	0		13397-24-5	1 - 5
Aluminum hydroxide	Not regulated.	-	0	0	0		21645-51-2	1 - 5

### 4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
- Notes to physician** : No specific antidote. Medical staff must contact Poison Control Center.

### 5 . Fire-fighting measures

- Flammability of the product** : Non-flammable.
- Products of combustion** : Decomposition products may include the following materials:  
sulfur oxides  
metal oxide/oxides
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : No specific fire or explosion hazard.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6 . Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 7 . Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 8 . Exposure controls/personal protection

	<b>United States</b>
<b>Product name</b>	<b>Exposure limits</b>
Aluminum Oxide	<b>ACGIH TLV (United States, 1/2006).</b> TWA: 10 mg/m <sup>3</sup> 8 hour(s).
	<b>NIOSH REL (United States, 12/2001).</b> TWA: 5 mg/m <sup>3</sup> , (as Al) 10 hour(s).
	<b>OSHA PEL (United States, 11/2006).</b> TWA: 5 mg/m <sup>3</sup> 8 hour(s). Form: Respirable fraction
Kaolin	<b>ACGIH TLV (United States, 1/2006).</b> TWA: 2 mg/m <sup>3</sup> 8 hour(s). Form: Respirable fraction
	<b>NIOSH REL (United States, 12/2001).</b> TWA: 5 mg/m <sup>3</sup> 10 hour(s). Form: Respirable fraction
	<b>OSHA PEL (United States, 11/2006).</b> TWA: 5 mg/m <sup>3</sup> 8 hour(s). Form: Respirable fraction
Gypsum	<b>ACGIH TLV (United States, 1/2006).</b> TWA: 10 mg/m <sup>3</sup> 8 hour(s). Form: Inhalable fraction

Aluminum hydroxide

**NIOSH REL (United States, 12/2001).**  
TWA: 5 mg/m<sup>3</sup> 10 hour(s). Form: Respirable fraction  
**OSHA PEL (United States, 11/2006).**  
TWA: 5 mg/m<sup>3</sup> 8 hour(s). Form: Respirable fraction  
**NIOSH REL (United States, 12/2001).**  
TWA: 2 mg/m<sup>3</sup>, (as Al) 10 hour(s).  
**OSHA PEL 1989 (United States, 3/1989).**  
TWA: 2 mg/m<sup>3</sup>, (as Al) 8 hour(s).

**Canada**

**Product name**

Aluminum Oxide

Kaolin

Gypsum

**Exposure limits**

**ACGIH TLV (United States, 1/2006).**  
TWA: 10 mg/m<sup>3</sup> 8 hour(s).  
**ACGIH TLV (United States, 1/2006).**  
TWA: 2 mg/m<sup>3</sup> 8 hour(s). Form: Respirable fraction  
**ACGIH TLV (United States, 1/2006).**  
TWA: 10 mg/m<sup>3</sup> 8 hour(s). Form: Inhalable fraction

**Mexico**

**Product name**

Aluminum Oxide

Kaolin

Gypsum

Aluminum hydroxide

**Exposure limits**

**NOM-010-STPS (Mexico, 9/2000).**  
LMPE-PPT: 10 mg/m<sup>3</sup> 8 hour(s).  
**NOM-010-STPS (Mexico, 9/2000).**  
LMPE-CT: 20 mg/m<sup>3</sup> 15 minute(s).  
LMPE-PPT: 10 mg/m<sup>3</sup> 8 hour(s).  
**ACGIH TLV (United States, 1/2006).**  
TWA: 10 mg/m<sup>3</sup> 8 hour(s). Form: Inhalable fraction  
**NOM-010-STPS (Mexico, 9/2000).**  
LMPE-PPT: 2 mg/m<sup>3</sup> 8 hour(s).

**Engineering measures**

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Eyes**

: Safety glasses with side shields.

**Skin**

: Lab coat.

**Respiratory**

: Disposable particulate mask

**Hands**

: Natural rubber (latex).



**HMIS Code/Personal protective equipment**

: E

**Personal protection in case of a large spill**

: Safety glasses, goggles or face shield. Impervious gloves. Full suit. Boots. Wear NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear.

**Hygiene measures**

: Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. Follow good industrial hygiene practice.

## 9 . Physical and chemical properties

<b>Physical state</b>	: Solid. [Crystalline powder.]
<b>Color</b>	: Off-white to tan.
<b>Odor</b>	: Odorless.
<b>pH</b>	: 3.5 to 9
<b>Melting/freezing point</b>	: 2053°C (3727.4°F)
<b>Relative density</b>	: 3.2 to 3.5
<b>Solubility</b>	: Partially soluble in the following materials: cold water and hot water.

## 10 . Stability and reactivity

<b>Stability and reactivity</b>	: The product is stable.
<b>Incompatibility with various substances</b>	: Reactive or incompatible with the following materials: oxidizing materials and acids.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
<b>Hazardous polymerization</b>	: Under normal conditions of storage and use, hazardous polymerization will not occur.
<b>Conditions of reactivity</b>	: Not available.

## 11 . Toxicological information

### Acute Effects

<b>Eyes</b>	: Slightly irritating to the eyes.
<b>Skin</b>	: Slightly irritating to the skin.
<b>Inhalation</b>	: Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs. May cause sensitization by inhalation.
<b>Ingestion</b>	: No known significant effects or critical hazards.
<b>Potential chronic health effects</b>	: CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for humans or animals.) by ACGIH [Aluminum Oxide]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [Kaolin]. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.
<b>Target organs</b>	: Contains material which causes damage to the following organs: lungs, upper respiratory tract, skin, eye, lens or cornea, stomach.

## 12 . Ecological information

<b>Environmental precautions</b>	: No known significant effects or critical hazards.
<b>Products of degradation</b>	: Not applicable.

## 13 . Disposal considerations

<b>Waste disposal</b>	: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
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## 14 . Transport information

### Regulatory information

UN/ IMDG/ IATA DOT/ TDG : Not regulated.

## 15 . Regulatory information

### United States

**HCS Classification** : Sensitizing material  
Target organ effects

**U.S. Federal regulations** : **United States inventory (TSCA 8b)**: All components are listed or exempted.  
**SARA 302/304/311/312 extremely hazardous substances**: No products were found.  
**SARA 302/304 emergency planning and notification**: No products were found.  
**SARA 302/304/311/312 hazardous chemicals**: Kaolin  
**SARA 311/312 MSDS distribution - chemical inventory - hazard identification**: Kaolin:  
Delayed (chronic) health hazard

**Clean Water Act (CWA) 307**: No products were found.

**Clean Water Act (CWA) 311**: phosphoric acid, trisodium salt, dodecahydrate; Sodium hydroxide

**Clean Air Act (CAA) 112 accidental release prevention**: No products were found.

**Clean Air Act (CAA) 112 regulated flammable substances**: No products were found.

**Clean Air Act (CAA) 112 regulated toxic substances**: No products were found.

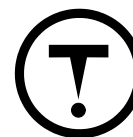
**State regulations** : **Connecticut Carcinogen Reporting**: None of the components are listed.  
**Connecticut Hazardous Material Survey**: None of the components are listed.  
**Florida substances**: None of the components are listed.  
**Illinois Chemical Safety Act**: None of the components are listed.  
**Illinois Toxic Substances Disclosure to Employee Act**: None of the components are listed.  
**Louisiana Reporting**: None of the components are listed.  
**Louisiana Spill**: None of the components are listed.  
**Massachusetts Spill**: None of the components are listed.  
**Massachusetts Substances**: The following components are listed: Aluminum Oxide  
**Michigan Critical Material**: None of the components are listed.  
**Minnesota Hazardous Substances**: None of the components are listed.  
**New Jersey Hazardous Substances**: The following components are listed: Aluminum Oxide  
**New Jersey Spill**: None of the components are listed.  
**New Jersey Toxic Catastrophe Prevention Act**: None of the components are listed.  
**New York Acutely Hazardous Substances**: None of the components are listed.  
**New York Toxic Chemical Release Reporting**: None of the components are listed.  
**Pennsylvania RTK Hazardous Substances**: The following components are listed: Aluminum Oxide; Kaolin; Gypsum; Aluminum hydroxide  
**Rhode Island Hazardous Substances**: None of the components are listed.

**WARNING**: This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Silica, Crystalline - Quartz	Yes.	No.	No.	No.

### Canada

WHMIS (Canada) : Class D-2A: Material causing other toxic effects (Very toxic).



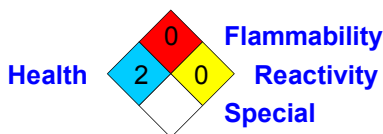
Canada inventory : All components are listed or exempted.

**CEPA Toxic substances:** None of the components are listed.  
**Canadian ARET:** None of the components are listed.  
**Canadian NPRI:** The following components are listed: Aluminum Oxide  
**Alberta Designated Substances:** None of the components are listed.  
**Ontario Designated Substances:** None of the components are listed.  
**Quebec Designated Substances:** None of the components are listed.

This product has been classified in accordance with the hazard criteria of the Canadian CPR, the United States OSHA and the Mexican NOM -018-STPS-2000. This MSDS contains all the information required by the CPR, OSHA, the American National Standard Institute (ANSI) Z400.1 and NOM -018-STPS-2000.

Mexico

Classification :



HAZARD RATINGS

- 4- Extreme
- 3- Serious
- 2- Moderate
- 1- Slight
- 0- Minimal

International lists : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16 . Other information

Label requirements (U.S.A.) : MAY CAUSE ALLERGIC RESPIRATORY REACTION. MAY CAUSE EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE.

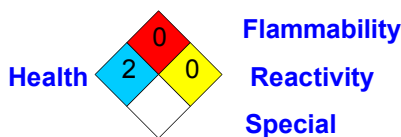
Hazardous Material Information System (U.S.A.) :

HMIS RATING	
Health	2*
Fire hazard	0
Physical Hazard	0
Personal protection	E

HAZARD RATINGS

- 4- Extreme
  - 3- Serious
  - 2- Moderate
  - 1- Slight
  - 0- Minimal
- See section 8 for more detailed information on personal protection.

National Fire Protection Association (U.S.A.) :



References : ANSI Z400.5, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005. - Official Mexican Standards NOM-018-STPS-2000 and NOM-004-SCT2-1994.

Date of issue : 01/01/2013  
Version : 1

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.