



MATERIAL SAFETY DATA SHEET

MATERIAL SAFETY DATA SHEET - May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

Date : 06/25/2001

Washington Mills Electro Minerals Corp. Brown Aluminum Oxide

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Duralum GW, GW/LBD, HRG, GW/HBD, HC, K5RL 700 & F, K5 WT, K5 X Buffing Powders, XA, Microgrits, Polishing Grains & Powders, RF, RF D/C Fines, G52E, G82, LT P&C, XA, Blastite BT, Niagra Blast, Duratred, LTR, Ultra L1

CHEMICAL NAME: Brown Aluminum Oxide

COMPANY IDENTIFICATION

Washington Mills
Electro Minerals Corp.
1801 Buffalo Ave.
P.O. Box 423
Niagra Falls, N.Y. 14302

EMERGENCY / TECHNICAL NUMBERS

(716) 278-6763
(716) 278-6650 (FAX)
CHEMTREC:
(800) 424-9300

PRODUCT INFORMATION: MSDS Requests and Product Information: (716) 278-6600

SPECIAL NOTES:

2. COMPOSITION / INFORMATION INGREDIENTS

<u>COMPONENTS</u>	<u>CAS No.</u>	<u>OSHA Exposure Limits (PEL)</u>	<u>ACGIH Recommended Limits (TLV)</u>	<u>Percent by Weight</u>
Aluminum Oxide (Al ₂ O ₃) ¹	1344-28-1	15 mg/m ³	10 mg/m ³	92-99
Titanium Dioxide (TiO ₂)	13463-67-7	15 mg/m ³	10 mg/m ³	1-4
Iron Oxide (Fe ₂ O ₃)	1309-37-1	10 mg/m ³	5 mg/m ³	0.1-1.5
Silicon Dioxide (SiO ₂)	7631-86-9	80 mg/m ³	30 mg/m ³	0.2-1.7
		% SiO ₂	% quartz +3	

¹ Non-fibrous form of aluminum oxide

COMPOSITION COMMENTS:

Other oxides total less than 1%. All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYE: May irritate eyes.

SKIN: Not absorbed through the skin. May cause abrasions.

INGESTION: No known adverse effects, but ingestion is not recommended.

INHALATION: May cause coughing or shortness of breath.

CHRONIC EFFECTS: May affect breathing capacity.



4. FIRST AID MEASURES

EYE: Wash with large amounts of water. Get medical attention if needed.

SKIN: Wash with water. Obtain first aid or medical assistance if needed.

INGESTION: If swallowed, seek medical attention.

INHALATION: Remove to fresh air, apply artificial respiration as needed. Get medical attention if needed.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES: Nonflammable

FLASH POINT: None

AUTOIGNITION: None

FLAMMABILITY LIMITS (% by volume in air): None

EXTINGUISHING MEDIA: N/A

NFPA RATINGS: Health 0; Flammability 0; Reactivity 0.

FIRE FIGHTING INSTRUCTIONS: None

SPECIAL FIRE FIGHTING PROCEDURES: None

COMBUSTION PRODUCTS: None

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear protective equipment. See Section 8.

CLEANUP MEASURES: Normal cleanup procedures. Avoid generating dust. Dispose according to standard landfill methods consistent with applicable Federal, State and Local laws.

7. HANDLING AND STORAGE

NORMAL STORAGE: General storage, ambient air temperature and pressure.

HANDLING: Avoid generating dust. Handle with adequate ventilation for dust. See OSHA 29 CFR 1910-94 (Ventilation).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposures below PELs or TLVs.

RESPIRATORY PROTECTION: Recommended if PELs or TLVs are exceeded. Use NIOSH/MSHA approved respirators.

EYE AND FACE PROTECTION: Use safety glasses with side shields. If there is potential for exposure to particles which could cause mechanical injury to the eye, wear goggles.

SKIN AND HAND PROTECTION: Gloves as desired by user.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: Granular Solid, Brown to Black

ODOR: Odorless

VAPOR PRESSURE: N/A

BOILING POINT: N/A

MELTING POINT: 2040°C

SPECIFIC GRAVITY: 3.95

EVAPORATION RATE: N/A

PERCENT VOLATILE (VOL): N/A

pH: N/A

FLASH POINT: None

VAPOR DENSITY (AIR=1): N/A

FREEZING POINT: N/A

SOLUBILITY: Insoluble in water, partially soluble in HF

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

VISCOSITY: N/A



10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS: N/A

CHEMICAL STABILITY: Stable.

CONDITIONS TO AVOID: N/A

INCOMPATIBILITY WITH OTHER MATERIALS: None

HAZARDOUS POLYMERIZATION: Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Not Available.

12. ECOLOGICAL INFORMATION

Not Available.

13. DISPOSAL CONSIDERATIONS

Approved landfill in accordance with all local, state and federal regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT - Not regulated as a hazardous material.

15. REGULATORY INFORMATION

TSCA - The chemical components of this product are registered under the Toxic Substance Control Act (Title 40 CFR Part 710).

Originally prepared by: Kimberley Minkel, Manager Environmental, Health & Safety, Washington Mills.

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date hereof; however, Washington Mills Electro Minerals Corporation makes no expressed or implied warranty with respect to the accuracy or the information or the suitability of the recommendations and assumes no liability to any user thereof.