



**Material Safety Data Sheet**  
**Revised 1/1/2009**

**I - Chemical Name                      Product Names                      Molecular Formula**

Brown Fused Aluminum Oxide	V-Blast R-Blast	Al <sub>2</sub> O <sub>3</sub> Al <sub>2</sub> O <sub>3</sub>
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**II - Composition/Information on Ingredients**

<u>Chemical Name</u>	<u>CAS No.</u>	<u>% by wt. ACCIH (TLV)</u>		<u>Carcinogen?</u>
Aluminum Oxide - Al <sub>2</sub> O <sub>3</sub>	1344-28-1	92.0 - 96.5	10 mg/m <sup>3</sup>	No
Titanium Dioxide - TiO <sub>2</sub>	13463-67-	1.0 - 4.0	10 mg/m <sup>3</sup>	No
Silicon Dioxide - SiO <sub>2</sub>	7631-86-9	0.0 - 1.0	80 mg/m <sup>3</sup>	No
Iron Oxide - Fe <sub>2</sub> O	1309-37-1	0.1 - 1.5	5 mg(Fe)/m <sup>3</sup>	No
Impurities, other total oxides (trace amounts)		<1.0		

**III - OSHA Permissible Exposure Limits (PEL)**

	<u>Total Weighted Avg.</u>	<u>Respirable Weighted Avg.</u>
Aluminum Oxide	15 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Titanium Dioxide	15 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Silicon Dioxide	80 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Iron Oxide	10 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>

**IV - Physical Data**

Vapor Pressure	0	Solubility in water	Insoluble
Vapor Density	n/a	Specific Gravity (water = 1)	3.95
Evaporation Rate	0	Percent volatile	0
% solid by wgt.	100	PH	Neutral
Appearance	Brown, granular	Odor	None

**V - Fire & Explosion Hazard Data**

Flashpoint	None	Flammable Limits	None
Unusual Fire or Explosion Hazards	None	Special Fire Fighting Procedures	None

**VI - Stability & Reactivity Data**

Chemical Stability	Stable	Incompatibility	None
Hazardous Polymerization	Will not occur	Hazardous Decomposition Products	None
Thermal Decomposition	None	Dangerous Reactions	None
Conditions to avoid	None		

## VII – Potential Health Effects

Emergency Overview: Dust irritating to eyes and respiratory tract

Eyes	-	Mechanical eye irritant, many cause tearing and redness
Skin	-	Mechanical skin irritant, prolonged contact many cause abrasions, redness or itching
Ingestion	-	Many cause nausea and vomiting. No long term effects are anticipated
Inhalation	-	Dust maybe slightly irritating to respiratory tract. Many cause coughing/shortness of breath
Target Organs	-	Eyes, skin, and respiratory system
Effects of Exposure	-	May include persistent cough or shortness of breath
Chronic Exposure	-	N/A

## VIII – Exposure & Personal Controls

Plant Controls	-	Provides sufficient mechanical ventilations to reduce airborne concentrations and minimize exposure. Maintain employee exposure to below applicable permissible limits
Hygiene Measures	-	Do NOT inhale dust/smoke/mist. Avoid contact with eyes or skin. Wash hands before eating.
Sensitization	-	N/A
Protection in Workplace	-	If concentrations of airborne dust exceed limits listed in Section III, Exposure Limits, follow the OSHA respirator regulations found in 29CFR 1910.134.
Eye Protection	-	Avoid eye contact. To minimize the risk of eye injury, always wear appropriate protective glasses or chemical safety goggles
Skin Protection	-	Avoid skin contact. Wear appropriate protective clothing to minimize risk of abrasion or skin irritation.

## IX – First Aid Measures

Eyes	-	Flush eyes with large amounts of water. If symptoms persist, seek medical attention
Skin	-	Wash effected area with soap & water. If symptoms persist, seek medical attention
Inhalation	-	Remove affected person to fresh air. If symptoms persist, seek medical attention
Ingestion	-	In the unlikely case of ingestion, leave the decision to induce vomiting to qualified medical personnel so as to avoid aspirating into the lungs. Seek immediate medical attention.

## X – Fire Fighting Measures

Flammable/Combustible Properties	-	None
Extinguishing Media	-	Extinguisher suitable for ordinary combustible materials, Class A extinguishing agents
Special Fire Fighting Procedures	-	None

## XI – Accidental Release Measures

Personal Safety Precautions	-	Avoid creating dust
Environmental Precautions	-	Ensure that materials are properly disposed of
Clean-up Measures	-	Collect spilled materials by means of vacuuming or sweeping and place in a suitable container

## **XII – Handling & Storage**

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|----------|---|--|
| Handling | - | Avoid contact with eyes or skin. Wash hands before eating. Prevent the formation of dust. Handle with adequate ventilation.                              |
| Storage  | - | Use normal storage practices. Store in original containers in a well ventilated area. Keep containers tightly sealed. Avoid stacking more than two high. |

## **XIII – Accidental Release Measures**

Solid or chemical waste generators must determine if their discarded wastes are classified as a hazardous waste. U.S EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local waste regulations to ensure complete and accurate classification. Generally speaking, Brown Fused Aluminum Oxide, in and of itself, has NOT been classified as hazardous. Elements of the work piece being prepared can affect whether the spent oxide is hazardous. Check with your aluminum oxide source for accurate details.

## **XIV – Transportation Information**

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| U.S DOT | - | This product is not regulated by USDOT as a hazardous material, no placard required to move this material |
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## **XV – Regulatory Information**

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|--------|---|---|
| TSCA   | - | Aluminum Oxide is listed on the TSCA inventory under CAS# 1344-28-1   |
| RCRA   | - | Aluminum Oxide is not classified as a hazardous material under RCRA or its regulations, 40 CFR 302                                |
| CERCLA | - | Aluminum Oxide is not classified as a hazardous substance under CERCLA regulations, 40 CFR 302                                    |
| SARA   | - | Aluminum Oxide is not extremely hazardous substance in Section 302 and is not a toxic chemical subject to the requirements of 313 |