

# MATERIAL SAFETY DATA SHEET

Date Issued: 09/29/2008  
 MSDS No: BS1027  
 Date Revised: 12/09/2008  
 Revision No: 1

## TruEtch™ Aluminum Oxide

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** TruEtch™ Aluminum Oxide  
**PRODUCT DESCRIPTION:** Aluminum Oxide  
**PRODUCT CODE:** 50 micron: 12300, 90 micron: 12400  
**CHEMICAL FAMILY:** Refractory Oxide  
**MOLECULAR FORMULA:** Al<sub>2</sub>O<sub>3</sub>  
**GENERIC NAME:** Aluminum Oxide

#### MANUFACTURER

Ortho Technology, Inc.  
 17401 Commerce Park Boulevard  
 Tampa FL 33647  
**Product Stewardship:** 1-800-999-3161

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS	% BY WEIGHT
Aluminum Oxide (Alpha Alumina)	1344-28-1	60 - 100

See Section 8 for Exposure Limits

### 3. HAZARDS IDENTIFICATION

#### POTENTIAL HEALTH EFFECTS

- EYES:** May cause irritation to the eyes.  
**SKIN:** No evidence of adverse effects expected.  
**INGESTION:** Non toxic. May cause irritation of the throat and digestive passageways.  
**INHALATION:** Choking sensation. Respiratory system passageways irritation.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

- ACUTE TOXICITY:** Individuals with lung disorders should not be exposed to conditions where large airborne quantities of the nuisance dust exist without precautions taken to alleviate the aggravated preexisting medical condition.  
**CHRONIC EFFECTS:** No adverse effects expected.  
**CARCINOGENICITY:** No evidence of carcinogenicity.

**MEDICAL CONDITIONS AGGRAVATED:** Not expected to be a health hazard.

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

**SKIN:** Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing

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and shoes. Wash before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

**INGESTION:** Give several glasses of water to dilute. If large amounts were swallowed, get medical advice.

**INHALATION:** Remove to fresh air. Get medical attention for any breathing difficulty.

### 5. FIRE FIGHTING MEASURES

**FLAMMABLE LIMITS:** Not flammable

**FLAMMABLE CLASS:** Material is not flammable.

**EXPLOSION HAZARDS:** None

### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Avoid dust during clean up.

**COMMENTS:** Waste material may be considered as inert material.

### 7. HANDLING AND STORAGE

**COMMENTS:** Avoid dust during clean up

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### EXPOSURE GUIDELINES

HAZARDOUS COMPONENTS					
EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Aluminum Oxide (Alpha Alumina)	<b>TWA</b>	NA = Not Applicable [1]	15*/5^ mg/m <sup>3</sup> [1]	NA = Not Applicable [1]	10*/5^ mg/m <sup>3</sup> [1]
<b>Footnotes:</b>					
1. * = Total dust, ^ = Respirable fraction					

**OTHER USE PRECAUTIONS:** Use with adequate ventilation to meet exposure limits. When exposure is excessive, NIOSH approved respiratory protection should be used.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**ODOR:** Odorless

**COLOR:** Light brown or white

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**pH:** 7 to 8

**MELTING POINT:** to 2038°C (3700°F)

**SOLUBILITY IN WATER:** Insoluble in water and organic solvents

**SPECIFIC GRAVITY:** 3.97 Gm/cc

**COMMENTS:** Hardness: 9 Mohs scale; 2100 Knoop Scale

### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal conditions of use, transportation, and storage.

**POSSIBILITY OF HAZARDOUS REACTIONS:** None with water, air, heat, or strong oxidizers

### 11. TOXICOLOGICAL INFORMATION

**COMMENTS:** No evidence of carcinogenicity

### 12. ECOLOGICAL INFORMATION

**COMMENTS:** None Reported

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose in accordance with all local, state and federal regulations. Dispose of waste at an appropriate waste disposal facility according to current applicable laws and regulations

### 14. TRANSPORT INFORMATION

**COMMENTS:** None Reported

### 15. REGULATORY INFORMATION

### 16. OTHER INFORMATION

**REASON FOR ISSUE:** New MSDS Format

**APPROVED BY:** J.Hutchins      **TITLE:** QA/RA Director

**PREPARED BY:** T.Swan

**INFORMATION CONTACT:** 1-800-999-3161

**REVISION SUMMARY:** Revision #: 1. This MSDS replaces the May 14, 2008 MSDS., , , , , , , , Any changes in information are as follows: In Section 1: Approved by, Title, Prepared By, Date PreparedIn

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Section 2: Chronic Effects, Medical Conditions Aggravated  
In Section 4: Firstaid - Eyes, Firstaid - Skin,  
Firstaid - Ingestion, Firstaid - Inhalation  
In Section 12: Comments  
In Section 13: Disposal  
In Section 14: Comments  
In Section 15: Comments  
In Section 16: Comments

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