

PRECISION SURFACES INTERNATIONAL

922 Ashland Houston, TX 77008-6734

713-426-2220 Fax: 713-426-2223

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION				
Manufacturer/Supplier:		Precision Surfaces International, Inc.		
		922 Ashland, Houston, Texas 77008-6734		
Emergency Telephone:		Infotrac: 800-535-5053		
Product Name:		Ultralox Aluminum Oxide		
Description:		Hi-Purity Alumina Powder		
PSI Part Number:		PSI-5601-1 or 5 PSI-5603-1 or 5 PSI-5605-1 or 5 PSI-5650-1 or 5		
2. COMPOSITION/INFORMATION ON INGREDIENTS				
Name:	CAS Number:	Percent:	OSHA PEL:	ACGIH TLV:
Alumina Oxide, Al ₂ O ₃	1344-28-1	NA	10mg/m ³ TWA as dry dust	10mg/m ³ TWA as dry dust
3. HAZARDS IDENTIFICATION				
Toxicity Data:		This specific material has not been tested. Data on a similar material follows: Rabbit skin LD50: 4g/kg. Rabbit skin irritation index: 0.2 (max score possible is 8.0). Rabbit eye irritation index: 6 (max score possible is 110). Inhalation: Rats survived exposure to a concentration of 83 mg/l for 4 hour. Ingestion: Acute oral LD50 in rats: 20g/kg.		
Potential Health Effects:				
	Eye:	May cause eye irritation.		
	Skin:	Acute overexposure may cause skin irritation.		
	Ingestion:	No hazard under normal circumstances.		
	Inhalation:	May cause physical irritation to upper respiratory tract. This material is a nuisance dust & such as does not produce significant organic disease or toxic effect with reasonable exposures.		
Chronic Health Effects/Carcinogenicity:				
	NTP:	NA		
	OSHA:	NA		
	IARC:	NA		

Medical Restrictions:	NA
4. FIRST AID MEASURES	
Eyes:	Flush with water for 15 minutes. Seek medical aid.
Skin:	Wash with soap and water. If irritation occurs, seek medical aid.
Ingestion:	Not normal route of exposure. No known effects. Seek medical advice.
Inhalation:	Remove to fresh air. Seek medical aid.
5. FIRE FIGHTING MEASURES	
Fire Fighting:	Non-flammable Material
Extinguishing Media:	Non-flammable Material
Hazardous Combustion Products:	NA
Flash Point:	NA
Lower Flammable Limit:	NA
Upper Flammable Limit:	NA
Autoignition:	NA
Conditions of Flammability:	NA
Explosion Data:	This is an inert material and will not produce a dust explosion.
Impact Sensitivity:	NA
Static Discharge:	NA
6. ACCIDENTAL RELEASE MEASURES	
General:	Sweep, scoop or vacuum and remove.
Small Spills:	See above
Large Spills:	See above
7. HANDLING AND STORAGE	
Handling:	Wash hands thoroughly after handling.
Storage:	Avoid direct sunlight during prolonged storage.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
Exposure Limits:	1985-86 ACGIH classifies alumina as a nuisance dust. See Section 2.
Ventilation:	Mechanical - Adequate ventilation to reduce levels of air contaminant below that which may cause personal injury or illness.
Respiratory Protection:	Use NIOSH/MSHA approved respirator where dust may occur.
Eye Protection:	Chemical splash goggles

Skin Protection:	Rubber or neoprene gloves. Barrier cream recommended for persons with unusual skin sensitivity.
Other:	NA
9. PHYSICAL AND CHEMICAL PROPERTIES	
Physical State:	Powder
Color:	White
Odor:	Odorless
Specific Gravity:	NA Water = 1
Vapor Pressure:	NA
Vapor Density:	NA Air = 1
Evaporation Rate:	NA Butyl Acetate = 1
Volatile Fraction by Weight:	NA
Boiling Point:	NA
Freezing Point:	NA
Wet. Per Gallon:	NA
Liquid Density:	NA
Solubility in Water:	Dispersible
pH:	NA
10. STABILITY AND REACTIVITY	
Stability:	Stable
Reactivity:	NA
Incompatibility:	Incompatible with hot chlorinated rubber.
Hazardous Polymerizations:	Will not occur.
Decomposition:	No known hazardous decomposition.
11. ECOLOGICAL INFORMATION	
Data:	NA
12. DISPOSAL INFORMATION	
RCRA Hazardous Waste:	NA
Waste Disposal:	Comply with Federal, State and Local regulations. Consideration must be made of the additional kerf added during use which may change toxicity.

13. TRANSPORTATION INFORMATION		
DOT Hazard Class:	NA	
Proper Shipping Name:	NA	
Identification Number:	NA	
14. REGULATORY INFORMATION		
Federal EPA:		
	SARA Title III:	NA
	TSCA Status:	NA
	WHMIS Classification:	NA
State Right-to-Know:		
	California-65:	NA
	Florida:	NA
	Massachusetts:	NA
	New Jersey:	NA
	Pennsylvania:	NA
15. OTHER		
HMIS Code:	Health=1, Flammability=0, Reactivity=0 Canadian WHMIS Classification: D2B	
(0=minimal hazard, 1=slight hazard, 2=moderate hazard, 3=serious hazard, 4=extreme hazard)		
The above information and recommendation are believed to be accurate and reliable. However, no warranty, either expressed or implied, is made as to its accuracy or completeness and none is made as to fitness of this material for any purpose. The manufacturer or supplier shall not be liable for damages to person or property resulting from its use. Nothing herein shall be construed as a recommendation for use in violation of any patent.		

NA = Not Applicable

Last Revision: 5/1/00

Scientific Instrument Services, Inc.
Supplies and Services for Mass Spectrometers, Gas Chromatographs and Liquid Chromatographs

ALX 6000 ALUMINUM OXIDE: Material Safety Data Sheet (MSDS)

SECTION I - PRODUCT IDENTIFICATION

MANUFACTURERS NAME: Econoline Manufacturing Company

335 N. Griffin Street Emergency Phone: 616-846-4150
Grand Haven, MI 49417

TRADE NAME: United Abrasive AO DOT Class/ID Number:

CHEMICAL & COMMON NAME AND SYNONYMS: Aluminum Oxide, Alpha Alumina

CHEMICAL FAMILY: Inert oxide

FORMULA: A1203

SECTION II - HAZARDOUS INGREDIENTS

THIS SECTION NOT APPLICABLE

Hazardous mixtures of other liquids, solids or gases: NONE

SECTION - III PHYSICAL DATA

Boiling Point (deg. F): NA	Specific Gravity (H ₂ O=1): 3.97
Vapor Pressure (mm Hg):	Volatiles by Volume: NA
Vapor Density (AIR=1): NA	Evap. Rate: NA
Appearance & Odor: NA	

SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point (F): NA Flammable Limits LEL: NA UEL: NA

Extinguishing Media: NA

Special Fire Fighting Procedures: NA

Unusual Fire & Explosion Hazards: NONE

SECTION V - FIRST AID

Effects of overexposure:

Emergency and first aid procedures:

SECTION VI - REACTIVITY DATA

Stability: Unstable: Stable: Yes Conditions to Avoid:

Incompatibility (Materials to Avoid): NONE

Hazardous Decomposition Products: NONE

Hazardous Polymerization: Will not occur Conditions to Avoid:

SECTION VII - SPILL OF LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

No special procedures required

WASTE DISPOSAL METHOD: No special procedures required.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection (special type): Avoid inhalation as would be true with any inert particulate material

Ventilation:

Local Exhaust: Recommended

Mechanical (general):

Special:

Protective Gloves:

Eye Protection: Avoid eye contact as with granular material

Other Protective Equipment:

SECTION IX - SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing: Indefinite shelf life, keep dry for best performance.

Other Precautions: Avoid ingestion as with any inert, non-toxic, non-edible material.