

MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT IDENTIFICATION

TRADE NAME: Aluminum Oxide Polishing Compound (Al₂O₃)**CAS NO.:** 1344-28-1**SYNONYMS:** Alumina**FORM:** Mixture of Al₂O₃ Powder and H₂O**CHEMICAL FAMILY:** Inorganic compound, metal oxide**MANUFACTURER / SUPPLIER:** II-VI Incorporated
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SECTION II – COMPOSITION / INGREDIENTS

<u>MATERIAL COMPONENTS:</u>	<u>% ATOMIC:</u>	<u>CAS NUMBER</u>
Aluminum Oxide	60%	1344-28-1
Water (H ₂ O)	40%	N/A

PHYSICAL PROPERTIES:

SECTION III – HAZARDS IDENTIFICATION

THRESHOLD LIMIT VALUE:

Material	OSHA 8-hr. PEL	ACGIH 8-hr. TLV
Nuisance Dust (Total Dust)	15 mg/m ³	10 mg/m ³
Nuisance Dust (Respirable Fraction)	5 mg/m ³	

EFFECTS OF OVEREXPOSURE: Inhalation of finely divided particles may cause lung damage (shaver's disease). In dust form it will cause irritation to eyes, nose and throat.

SECTION IV – FIRST-AID MEASURES

EMERGENCY AND FIRST AID PROCEDURES (in dust form):

EYES: Flush eyes with water for 15 minutes. Consult physician if irritation develops or persists.

SKIN: Wash with soap and water. Consult physician if irritation develops or persists.

INGESTION: Give several glasses of water to drink to dilute. If large amounts were swallowed, consult physician.

INHALATION: Remove from exposure, treat symptomatically, consult physician

SECTION V – FIRE-FIGHTING MEASURES

Not flammable and not explosive.

SECTION VI – ACCIDENTAL RELEASE

RESPIRATORY PROTECTION: NIOSH approved respiratory when used in powder form for prolonged periods of time.

VENTILATION: Local Exhaust
 Mechanical (General)
 Special (Specify)
 Other (Specify) See Below

Local dust pickup recommended.

SECTION VII – HANDLING AND STORAGE

HANDLING AND STORAGE: Avoid agitation and open container to avoid dusting of powder. Use with adequate ventilation and keep container closed when not in use. Use goggles and respirator in unusually dry conditions. Avoid prolonged contact with skin and use gloves if necessary. Keep dry and do not take internally.

SECTION VIII – EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE PROTECTION: Safety glasses are recommended.

SKIN PROTECTION: Rubber gloves and protective work clothing are recommended.

INGESTION: Good work practices such as keeping hands clean and not letting slurry splash significantly should be followed so that transferal to mouth by contamination on the hands or clothing followed by ingestion will not occur. Wash hands and face thoroughly after handling material and before eating, drinking, smoking or using restroom facilities.

DUST INHALATION: NIOSH approved respiratory protection is recommended where the exposure limit is or may be exceeded.

SECTION IX – PHYSICAL AND CHEMICAL CHARACTERISTICS

FORM: Powder	COLOR: White
ODOR: Odorless	MELTING POINT: 2050°C
BOILING POINT, 760 mm Hg: 2977°C	SPECIFIC GRAVITY (H₂O=1): 3.99
VAPOR PRESSURE: 1 mm at 2158°C	VAPOR DENSITY (Air=1): N/A
SOLUBILITY IN H₂O, % by WT: Insoluble	% VOLATILES BY VOL.: N/A
FLASH POINT (Test Method): Not flammable and not explosive	

SECTION X –STABILITY AND REACTIVITY

STABILITY: Stable; not reactive.

CONDITIONS TO AVOID: Extreme heat.

MATERIALS TO AVOID: Ethylene Oxide, Chlorine Trifluoride.

HAZARDOUS DECOMPOSITION PRODUCTS: None Known

HAZARDOUS POLYMERIZATION: Will not occur Will occur

SECTION XI – TOXICOLOGICAL INFORMATION

EPA-D: Not classifiable as to human carcinogenicity: Inadequate human and animal evidence of carcinogenicity or no data are available.

IARC-3: Unclassifiable as to carcinogenicity in humans.

MAK-3B: In vitro tests or animal studies have yielded evidence of carcinogenic effects that is not sufficient for classification of the substance in one of the other categories. Further studies are required before a final classification can be made.

SECTION XII – ECOLOGICAL INFORMATION

Ecotoxicity: No information was found in the references reviewed.

Environmental Fate: No information was found in the references reviewed.

Bioaccumulation: No information found in the references reviewed.

SECTION XIII – DISPOSAL INFORMATION

Dispose in a licensed industrial waste facility in compliance with all local, state and federal regulations.

SECTION XIV – TRANSPORT INFORMATION

Not a hazardous material for transportation.

SECTION XV - REGULATORY INFORMATION


TSCA: Yes

SARA 311/312: Acute


SECTION XVI - REFERENCES

1. "Dangerous Properties of Industrial Materials," Richard J. Lewis, Sr., 2000, 10th Edition.
2. 2005 "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices," published by American Conference of Governmental Industrial Hygienists.

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 Environmental Health and Safety Manager



 Date