

Aluminum Oxide 0144 RevB
Materials Safety Data Sheet

SECTION I – General Information

Manufacturer's Name: Danville Engineering
2021 Omega Road
San Ramon, CA 94583
Telephone: (925) 838-7940
Company Contact: Compliance Manager
Date (Revised) October 21, 1996
Product/Trade Name: Fused Aluminum Oxide
Synonyms: Alpha Alumina
Chemical Family: Refractory Oxide
Formula: Al₂O₃

SECTION II – Hazardous Components

None

SECTION III – Physical Data

Melting Temperature: 3700 Degrees F (2038 degrees C)
Specific Gravity: 3.97 gm/cc
Hardness: 9 Mohs scale; 2100 Knoop Scale
Water Solubility: Insoluble in water and organic solvents
pH: 7-8
Color: Light brown or white
Odor: None, odorless

SECTION IV – Fire & Explosion Data

Non-flammable; does not support combustion. Not an explosion hazard.

SECTION V – Health Data

Chemical Name	C.A.S. NO	Percent	Limits for air contaminants	
			TWA Mg/M3	PEL Mg/M3
Alpha Alumina (Al ₂ O ₃)	1344-28-1	99+%		
Total Dust			10(e)	15
Respirable Fraction			5	5

Source of Exposure Limit Data

ACGIH Threshold Limit Values; OSHA Tables: Z-1-A, Z-2, Z-3

Possible effects of Overexposure: 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.

Inhalation: Choking sensation, respiratory system passageways irritation.
Skin Contact: No evidence of adverse effects expected.
Eye Contact: May cause Irritation.
Swallowing: Non-toxic. May cause irritation of the throat and digestive passageways.
Carcinogen: No evidence of carcinogenicity.

SECTION VI – Reactivity Data

None with water, air, heat, or strong oxidizers.

SECTION VII – Environmental

Waste may be considered as inert material.

SECTION VIII – Handling, Storage, Transportation

Stable under normal conditions of use, transportation, and storage.

Spill, leak and disposal: Avoid dust during cleanup.

SECTION IX – Special Precautions

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