



Health
Fire
Reactivity
Personal Protection

# Material Safety Data Sheet

## Aluminum oxide, activated, neutral, Brockmann I MSDS

### Section 1: Chemical Product and Company Identification

**Product Name:** Aluminum oxide, activated, neutral, Brockmann I

**Catalog Codes:** SLA1801

**Synonyms:** Alumina

**Contact Information:**

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: 1-800-901-7247

International Sales: 1-281-441-4400

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

### Section 2: Composition and Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
1344-28-1	Aluminum oxide		215-691-6

**Hazard Symbols:** None listed.

**Risk Phrases:** None listed.

### Section 3: Hazards Identification

**EMERGENCY OVERVIEW:** Not available.

**Target Organs:** Lungs, bone.

**Potential Health Effects:**

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation. May be harmful if absorbed through the skin.

**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed.

**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled.

**Chronic:** Chronic exposure may cause lung damage.

### Section 4: First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Get medical aid. Wash mouth out with water.

**Inhalation:** Remove from exposure and move to fresh air immediately.

**Notes to Physician:** Treat symptomatically and supportively.

### Section 5: Fire and Explosion Data

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible.

**Extinguishing Media:** Use extinguishing media most appropriate for the surrounding fire.

**Flash Point:** Not available.

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** Not published.

### Section 6: Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container.

### Section 7: Handling and Storage

**Handling:** Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

**Storage:** Store in a cool, dry place. Store in a tightly closed container.

### Section 8: Exposure Controls/Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits:**

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Aluminum oxide	10 mg/m <sup>3</sup> TWA (particulate matter containing no asbestos and < 1% crystalline silica)	none listed	15 mg/m <sup>3</sup> TWA (total dust); 5 mg/m <sup>3</sup> TWA (respirable fraction)

**OSHA Vacated PELs:** Aluminum oxide: 10 mg/m<sup>3</sup> TWA (total dust); 5 mg/m<sup>3</sup> TWA (respirable fraction)

**Personal Protective Equipment:**

**Eyes:** Not available.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

## Section 9: Physical and Chemical Properties

**Physical State:** Powder

**Appearance:** white

**Odor:** Not available.

**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 2977 deg C @760mmHg

**Freezing/Melting Point:** 2030 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Not available.

**Specific Gravity/Density:** Not available.

**Molecular Formula:** Al<sub>2</sub>O<sub>3</sub>

**Molecular Weight:** 101.96

## Section 10: Stability and Reactivity Data

**Chemical Stability:** Stable.

**Conditions to Avoid:** Incompatible materials, exposure to moist air or water.

**Incompatibilities with Other Materials:** Ethylene oxide, halogenated agents, nitrates, oxygen difluoride, vinyl acetate.

**Hazardous Decomposition Products:** Aluminum oxide.

**Hazardous Polymerization:** Will not occur.

## Section 11: Toxicological Information

**RTECS#:**

**CAS#:** 1344-28-1: BD1200000

**LD50/LC50:** Not available.

**Carcinogenicity:** CAS# 1344-28-1: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No data available.

**Teratogenicity:** No data available.

**Reproductive Effects:** No data available.

**Neurotoxicity:** No data available.

**Mutagenicity:** No data available.

**Other Studies:** Mutagenicity: Ames-test: negative.

## Section 12: Ecological Information

## Section 13: Disposal Considerations

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14: Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
<b>Shipping Name:</b>	No information available.				No information available.
<b>Hazard Class:</b>					
<b>UN Number:</b>					
<b>Packing Group:</b>					

## Section 15: Other Regulatory Information

### US FEDERAL:

**TSCA:** CAS# 1344-28-1 is listed on the TSCA inventory.

**Health & Safety Reporting List:** None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules:** None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b:** None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule:** None of the chemicals in this material have a SNUR under TSCA.

### SARA:

**CERCLA Hazardous Substances and corresponding RQs:** None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances:** None of the chemicals in this product have a TPQ.

**Section 313:** This chemical is not at a high enough concentration to be reportable under Section 313. No chemicals are reportable under Section 313.

**Clean Air Act:** This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

**Clean Water Act:** None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:** None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE:** CAS# 1344-28-1 can be found on the following state right to know lists: New Jersey, Pennsylvania, Minnesota, Massachusetts. California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations:**

**European Labeling in Accordance with EC Directives:**

**Hazard Symbols:** Not available.

**Risk Phrases:**

**Safety Phrases:** S 24/25 Avoid contact with skin and eyes.

**WGK (Water Danger/Protection):** CAS# 1344-28-1: 0

**Canada - DSL/NDSL:** CAS# 1344-28-1 is listed on Canada's DSL List.

**Canada - WHMIS:** WHMIS: Not available.

**Canadian Ingredient Disclosure List:** CAS# 1344-28-1 is listed on the Canadian Ingredient Disclosure List.

**Exposure Limits:** CAS# 1344-28-1: OEL-AUSTRALIA:TWA 10 mg/m<sup>3</sup> OEL-BELGIUM:TWA 10 mg/m<sup>3</sup> OEL-DENMARK:TWA 10 mg/m<sup>3</sup> OEL-FRANCE:TWA 10 mg/m<sup>3</sup> OEL-GERMANY:TWA 6 mg/m<sup>3</sup> OEL-THE NETHERLANDS:TWA 10 mg/m<sup>3</sup> OEL-RUSSIA:STEL 4 mg/m<sup>3</sup> OEL -SWITZERLAND:TWA 6 mg/m<sup>3</sup> OEL-UNITED KINGDOM:TWA 10 mg/m<sup>3</sup>;STEL 20 mg/m<sup>3</sup> OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NE W ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

## Section 16: Other Information

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