

MSDS #: 00163B

# Material Safety Data Sheet

Alumina (Activated/Adsorption/Dry Powder/Acid/Basic/Neutral/Polishing Gamal)

ACC# 00950

## Section 1 - Chemical Product and Company Identification

**MSDS Name:** Alumina (Activated/Adsorption/Dry Powder/Acid/Basic/Neutral/Polishing Gamal)**Catalog Numbers:** S79890, A446-100, A447-500, A505-212, A540-3, A540-500, A540500LC, A591-3, A591-500, A620-500, A634-3, A941-500, A948-500, A950-500, B365-250, C218-3, NC9045297, NC9558940, P467R, P477, S716842, XXA59145KG, XXA9415KG, ZZA950TF32**Synonyms:** Aluminum oxide; morin dyed; Alundum; Boileezers**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100**Emergency Number:** 201-796-7100**For CHEMTREC assistance, call:** 800-424-9300**For International CHEMTREC assistance, call:** 703-527-3887

## Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
1344-28-1	Aluminum oxide	100	215-691-6

**Hazard Symbols:** None listed.**Risk Phrases:** None listed.

## Section 3 - Hazards Identification

### EMERGENCY OVERVIEW

Appearance: white solid. **Caution!** May cause mechanical eye and skin irritation. May cause lung damage. May cause respiratory tract irritation.

**Target Organs:** Lungs.

**Potential Health Effects**

**Eye:** Dust may cause mechanical irritation.

**Skin:** Dust may cause mechanical irritation. Low hazard for usual industrial handling.

**Ingestion:** Ingestion of large amounts may cause gastrointestinal irritation. Expected to be a low ingestion hazard.

**Inhalation:** May cause respiratory tract irritation. May cause lung damage.

**Chronic:** Chronic inhalation of fine dusts 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:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

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

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use extinguishing media appropriate to the surrounding fire. Substance is noncombustible.

**Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

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

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

## 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. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Use with adequate ventilation. Minimize dust generation and accumulation. Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Avoid ingestion and inhalation.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep

airborne concentrations below the permissible exposure limits.

#### 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:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate 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:** Solid

**Appearance:** white

**Odor:** odorless

**pH:** Not available.

**Vapor Pressure:** Negligible.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 5396 deg F

**Freezing/Melting Point:** 3632 deg F

**Decomposition Temperature:** Not available.

**Solubility:** Negligible in water.

**Specific Gravity/Density:** 4.0 (water=1)

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

**Molecular Weight:** 101.9612

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable.

**Conditions to Avoid:** Incompatible materials, dust generation, excess heat.

**Incompatibilities with Other Materials:** Reacts with chlorine trifluoride or ethylene oxide.

**Hazardous Decomposition Products:** None.

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

**RTECS#:****CAS#** 1344-28-1: BD1200000**LD50/LC50:**

Not available.

**Carcinogenicity:****CAS#** 1344-28-1:**ACGIH:** A4 - Not Classifiable as a Human Carcinogen**Epidemiology:** No information available.**Teratogenicity:** No information available.**Reproductive Effects:** No information available.**Neurotoxicity:** No information available.**Mutagenicity:** No information available.**Other Studies:** No data available.

Section 12 - Ecological Information
-------------------------------------

No information available.

Section 13 - Disposal Considerations
--------------------------------------

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

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

Section 14 - Transport Information
------------------------------------

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

Section 15 - 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 &amp; 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 material contains Aluminum oxide (CAS# 1344-28-1, 100%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

**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:**

**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**

This product has a WHMIS classification of Not controlled..

**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/m3 OEL-BELGIUM:TWA 10 mg/m3  
OEL-DENMARK:TWA 10 mg/m3 OEL-FRANCE:TWA 10 mg/m3 OEL-GERMANY:TWA 6  
mg/m3 OEL-THE NETHERLANDS:TWA 10 mg/m3 OEL-RUSSIA:STEL 4 mg/m3 OEL  
-SWITZERLAND:TWA 6 mg/m3 OEL-UNITED KINGDOM:TWA 10 mg/m3;STEL 20 mg/m  
3 OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NE  
W ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

**Section 16 - Additional Information**

**MSDS Creation Date: 4/27/1999**

**Revision #3 Date: 3/18/2003**

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.*