

Material Safety Data Sheet

TABULAR ALUMINA

CAS # 1344-28-1

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1. Product and Company Identification

Manufacturer/Supplier:

Zhengzhou Haixu Abrasives Co.,Ltd.

Telephone: 86-371-63211283

Fax:86-371-60305637

Product Name: TABULAR ALUMINA

Other Designations:

AC99 - All mesh sizes and designations

Uses: Refractory material, Ceramic material, Abrasive material

2. Composition / Information on Ingredients

CAS No.	EINECS No.	Chemical or Component	% by weight
1344-28-1	215-691-6	Aluminum Oxide (Non-Fibrous)	>99.0
Hazard Symbols: None listed.		Risk Phrases: None listed.	Indication of Danger: Not dangerous

3. Hazards Identification

Emergency Overview:

White spheres, grain and/or powder with no odor. Inhalation of high concentrations of dusts of this substance may cause eye and upper respiratory tract irritation. This material is not flammable and does not support combustion. Primary routes of entry are inhalation, skin contact and eye contact.

Ingestion: May cause mild irritation.

Inhalation: May cause upper respiratory tract irritation.

Eye Contact: May cause mild irritation.

Skin Contact: May cause mild irritation.

Hazard Description

Medical conditions generally aggravated by exposure :

Asthma, chronic lung conditions or diseases and skin rashes.

Toxicological Data: See item 11.

Carcinogenicity: This product is not listed by NTP, IARC, or regulated as a carcinogen by OSHA.

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4. First Aid Measures

Ingestion:

Do not induce vomiting. If swallowed, dilute by drinking large amounts of water. Consult a physician or other qualified medical personnel.

Inhalation:

Remove to fresh air. Check for clear airway, breathing and presence of pulse. Provide cardiopulmonary resuscitation for persons without pulse or respirations. Consult a physician or other qualified medical personnel.

Eye Contact:

Flush eyes with ample amounts of water for at least 15 minutes. Consult a physician or other qualified medical personnel.

Skin Contact:

Wash with soap and water for at least 15 minutes. Consult a physician or qualified medical personnel if the condition persists.

5. Fire Fighting Measures

Fire / Explosion Hazards:

This product does not present fire or explosion hazards as supplied.

Extinguishing Media:

As deemed suitable by the environment.

Fire Fighting Equipment:

Respiratory and eye protection required for fire fighting personnel. Full protective equipment (Bunker Gear) and self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires.

6. Accidental Release Measures

Person-related Safety Precautions:

Avoid contact with skin and eyes.

Cleaning and Collecting Spills:

Vacuum or sweep material and place in a disposal container. Avoid dusting. Ensure adequate ventilation.

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7. Handling and Storage

Handling:

Ensure good ventilation in all work areas.
Minimize dusting and dust accumulation.

Storage:

No special requirements.

8. Exposure Controls and Personal Information

Exposure Guidelines:

1344-28-1 Aluminum Oxide (non-fibrous)
ACGIH 10mg/m³ (TWA - as Al)

OSHA PEL 15mg/m³ (TWA - total dust) 5 mg/m³ (TWA - respirable fraction)

Respiratory Protection:

Use NIOSH approved respiratory protection in case of insufficient ventilation and where exposure guidelines may be exceeded.

Skin Protection:

Wear suitable gloves and long sleeve shirts to avoid skin irritation or injury.

Eye Protection:

Use of safety glasses with full side shields is always recommended. Where air turbulence may be present, goggles are also recommended.

9. Physical and Chemical Properties

Appearance: Molecular Formula: Al₂O₃

White, crystalline powder **Molecular Weight:** 101.9612

Physical State: Solid **Odor:** None

Melting Point: 2050°C (3722°F) **Vapor Pressure:** Not applicable.

Boiling Point: Not determined. **Vapor Density:** Not applicable.

Flash Point: Not applicable. **Evaporation Rate:** Not applicable.

Solubility in Water: Negligible (less than 0.1%) **Oxidizing Properties:** Not applicable.

Density:

3.6 – 3.9 g/cm³

(0.13 – 0.14 lb/in³) **Lower Flammable Limit:** None.

Bulk Density

1980 - 2260 kg/m³

(125 - 140 lb/ft³) **Upper Flammable Limit:** None.

pH - 20°C: ~9.0 (10g/100ml) **Odor Threshold:** Not determined.

Autoignition: Product is not self igniting. **Partition Coefficient:** Not applicable.

Danger of Explosion: None present.

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10. Stability and Reactivity

Stability: Product is stable when used in accordance with specifications.

Conditions to Avoid: Incompatible materials.

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

Hazardous Decomposition Products: None noted.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

Acute Toxicity – LC50 = N/A

Primary Irritant Effect: LD50 = N/A

On the skin: Irritant to skin and mucous membranes.

On the eyes: Irritating effect.

Sensitization: No sensitizing effects known.

Additional Toxicological Information:

ACGIH: A4 - Not classifiable as a human carcinogen
RTECS No.: BD1200000

12. Ecological Information

General Notes:

Generally, no adverse conditions are anticipated, but may require compliance with governmental restrictions and permitting requirements prior to release.

Water Hazard Class (Wassergefährungsklasse):ID No. 1346

13. Disposal Considerations

Product -

Recommendation: Collect in containers or covered dumpsters. If reuse or recycling is not possible, material may be disposed of at an industrial landfill, subject to local regulations and restrictions.

Uncleaned packaging -

Recommendation: Disposal must be made according to official regulations.

RCRA Status:

If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic nor is it federally regulated. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste.

European Waste Catalog

Substrates

16 – Wastes not otherwise specified

16.03 – Off specification batches and unused products

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14. Transport Information

U.S. Department of Transportation (DOT): Not regulated

Canadian TDGR Hazard Class and PIN: Not regulated

Land Transport ADR/RID (cross-boarder): Not regulated

Maritime Transport IMDG: Not regulated

Marine Pollutant: Not listed

Air transport ICAO-TI and IATA-DGR: Not regulated

Placards: Not applicable

15. Regulations

U.S. Federal Regulations:

TSCA Chemical Inventory Status: All components of this product are listed.

CERCLA Reportable Quantity: None.

SARA Title III:

Section 302 Extremely Hazardous Substances: None.

Section 304 Emergency Release Reporting: None.

Section 311/312 Hazardous Categories: Immediate (acute).

Section 313 Toxic Categories: None.

Clean Air Act of 1990 – Title VI: This material does not contain nor was it manufactured using ozone depleting chemicals.

Canadian Regulations:

WHMIS Classification: Not a controlled product.

DSL (Domestic Substance List): All components of this product are listed on the DSL.

NPRI (National Pollutant Release Inventory): Not subject to mandatory reporting requirements.

IDL (Ingredient Disclosure List): All components of this product are listed on the IDL.

Canadian Hazard Symbol: Not applicable.

Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (Canada) and this MSDS contains all the information required by the Controlled Products Regulations (Canada).

European Union Classification: (EINECS 215-691-6)

Indication of Danger: Not dangerous.

Risk Phrases: None.

Safety Phrases: None.

This product is considered non-dangerous in accordance with 1999/45/EC.

USA State Regulations:

California Proposition 65: Not listed.

Cal-OSHA Workplace Airborne Contaminant: Listed.

Idaho Air Contaminant: Listed.

Illinois Toxic Substances Disclosure to Employees List: Listed.

Massachusetts Right to Know List: Listed.

Massachusetts Hazardous Substance Code: F9

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Minnesota Hazardous Substance List: Listed. Code: A Carcinogen: No

New Jersey Right to Know List: Listed – substance No. 2891

Pennsylvania Right to Know List: Listed.

Pennsylvania Hazardous Substance List (Chapter 323 Appendix A): Listed. Code: E

Rhode Island Hazardous Substance List: Listed.

Texas Air Contaminant with Health Effects Screening Level: Listed (as a synonym)

Washington Air Contaminant: Listed – limit TWA 10 mg/m³

16. Other Information

Hazard Ratings -

NFPA® Ratings: Health: **1** Flammability: **0** Reactivity: **0** Special: -

HMIS® III Codes : Health: **1** Flammability: **0** Physical Hazard: **0** PPE: *

*Note: PPE (Personal Protective Equipment) designation to be supplied by user depending upon use in their specific situation. HMIS guidelines do not permit this designation to be specified by the manufacturer/supplier – only by the end user.

Department Issuing MSDS:

Zhengzhou Haixu Abrasives Co.,Ltd.

MB:86-371-615890630517

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ABBREVIATIONS:

ACGIH American Conference of Governmental Industrial Hygienists
ADR European Agreement Concerning the International Carriage of Dangerous Goods by Road
CAS Chemical Abstract Service
CEPA Canadian Environmental Protection Act
CERCLA Comprehensive Environmental Response, Compensation and Liability Act
CFR United States Code of Federal Regulations
CPR Cardio-pulmonary Resuscitation
DOT United States Department of Transportation
DSL Canadian Domestic Substances List
EINECS European Inventory of Existing Commercial Chemical Substances
EPA United States Environmental Protection Agency
IDL Canadian Ingredient Disclosure List
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IATA-DRG International Air Transport Association – Dangerous Goods Regulations
ICAO International Civil Aviation Organization
ICAO-TI International Civil Aviation Organization – Technical Instructions on the Safe Transport of Dangerous Goods by Air
IMDG International Maritime Dangerous Goods Code
IMO International Maritime Organization
NDSL Canadian Non-domestic Substances List
NIOSH National Institute for Occupational Safety and Health (USA)
NTP National Toxicology Program (USA)
OEL Occupational Exposure Limit
OSHA United States Occupational Health and Safety Administration
PIN Product Identification Number
PPE Personal Protective Equipment
RCRA Resource Conservation and Recovery Act (USA)
RID European Agreement Concerning the International Carriage of Dangerous Goods by Rail
RTECS The Registry of Toxic Effects of Chemical Substances
SARA Superfund Amendments and Reauthorization Act (USA)
TDGR Transportation of Dangerous Goods Regulations
TLV Threshold Limit Values
TSCA Toxic Substances Control Act (USA)
TWA Time Weighted Average
cm = centimeter, ft = feet, g = gram, in = inch, kg = kilogram, lb = pound, ml = milliliter,
> = greater than

