

■ **NOT CLASSIFIED AS HAZARDOUS** under OSHA HazCom 2012 (29 CFR 1910.1200) / GHS criteria.
This SDS is provided as a courtesy. Exercise standard safe handling precautions for fine dusts.

SECTION 1: IDENTIFICATION

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| Product Name | Activated Alumina |
| CAS Number | 1344-28-1 |
| Synonyms | Aluminum Oxide; Alumina; Al ₂ O ₃ ; Aluminium Oxide; Alundum; Activated Aluminium Oxide |
| Product Use | Adsorbent; desiccant; chromatography media; water purification; filtration media |
| Supplier | Cannagas Supply 97 Turnpike Rd, Westborough, MA 01581 |
| Phone | 877-710-1965 |
| Email | Sales@canna-gas.com |
| Emergency Phone | CHEMTREC: 1-800-424-9300 (24-hour) |
| SDS Revision Date | March 2026 |

SECTION 2: HAZARDS IDENTIFICATION

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| GHS Classification | Not classified as hazardous per OSHA HazCom 2012 (29 CFR 1910.1200). |
| Signal Word | None required |
| Hazard Statements | None required under GHS classification criteria. |
| Precautionary Stmtns | P261: Avoid breathing dust/fume. P264: Wash thoroughly after handling. P271: Use in well-ventilated area. P280: Wear eye protection/dust mask when dust is generated. P304+340: IF INHALED: Remove to fresh air. If symptoms occur, seek medical attention. |
| Other Hazards | Dust inhalation may cause mechanical irritation to eyes, nose, throat, and respiratory tract. Prolonged inhalation of high concentrations of dust may be harmful. Fine airborne dust may present an inhalation hazard. Use appropriate dust control measures. |
| HMIS® Ratings | Health: 1 Flammability: 0 Physical Hazard: 0 |

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | CAS Number | Concentration | EC Number |
|---------------------------------------------------|------------|---------------|-----------|
| Aluminium Oxide (Al ₂ O ₃) | 1344-28-1 | >99% (w/w) | 215-691-6 |

Activated aluminium oxide. CAS 1344-28-1. EINECS/EC: 215-691-6. RTECS: BD1200000. Molecular formula: Al₂O₃. MW: 101.96 g/mol. May contain trace amounts of sodium oxide and other metal oxides typical of the manufacturing process.

SECTION 4: FIRST-AID MEASURES

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| Inhalation | Remove person to fresh air. If breathing difficulty occurs or symptoms persist, seek immediate medical attention. Keep at rest. |
| Skin Contact | Wash exposed areas with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation develops and persists. |
| Eye Contact | Flush immediately with large amounts of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth with water. Give several glasses of water to drink. Do NOT induce vomiting. Seek medical attention if a large amount was ingested. |

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| Key Symptoms | Eye irritation and mucous membrane irritation from dust. Skin irritation with prolonged contact. |
| Medical Note | Treat symptomatically. Inform medical personnel of substance involved. |

SECTION 5: FIRE-FIGHTING MEASURES

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| Suitable Extinguishing Media | Non-flammable. Use extinguishing media appropriate for surrounding fire (water, dry chemical, CO ₂ , foam). |
| Unsuitable Extinguishing Media | No restrictions known. |
| Specific Hazards | Not considered a fire hazard. Non-combustible. CAUTION: Chlorine trifluoride reacts violently with alumina producing flames. |
| Protective Equipment | Self-contained breathing apparatus (SCBA) and full protective clothing for fires in confined spaces or involving chemicals. |
| Additional Guidance | Firefighters should wear SCBA and full protective gear. Avoid stirring up dust clouds. Isolate large fires and allow to burn out. |
| Flash Point | Not applicable (solid) |
| Flammable Limits | Not applicable |

SECTION 6: ACCIDENTAL RELEASE MEASURES

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| Personal Precautions | Wear dust mask/respirator and safety goggles. Avoid generating dust. |
| Environmental Precautions | Prevent material from entering drains, sewers, or waterways. Report significant releases per local regulations. |
| Containment & Cleanup | Vacuum up or carefully sweep material into sealed containers. Avoid dry sweeping. Clean up in a manner that does not disperse dust into air. |
| Waste Disposal | Dispose in accordance with Section 13 and all applicable regulations. |

SECTION 7: HANDLING AND STORAGE

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| Safe Handling | Avoid breathing dust. Avoid contact with eyes and skin. Wash hands thoroughly after handling. Use in well-ventilated area. Avoid dust accumulation on surfaces. |
| Safe Storage | Store in a cool, dry, well-ventilated area in tightly closed containers. Keep away from moisture. No special temperature requirements. |
| Incompatibles | Chlorine trifluoride (reacts violently), hydrofluoric acid, strong acids, strong alkalis (alumina is amphoteric — slowly soluble in both). |

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

| Agency / Component | Type | Value |
|------------------------|------|----------------------|
| OSHA PEL (total dust) | TWA | 15 mg/m ³ |
| OSHA PEL (respirable) | TWA | 5 mg/m ³ |
| ACGIH TLV (respirable) | TWA | 1 mg/m ³ |
| NIOSH (total dust) | TWA | 10 mg/m ³ |
| NIOSH (respirable) | TWA | 5 mg/m ³ |

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| Engineering Controls | Local exhaust ventilation where dust is generated. General ventilation adequate for normal use. Provide eyewash station. |
| Eye/Face Protection | Safety goggles or glasses with side shields where dust exposure is possible. |
| Hand Protection | General work gloves for normal handling. Chemical-resistant gloves for bulk processing. |

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| Body Protection | Normal work clothing. Long sleeves recommended to minimize skin contact with dust. |
| Respiratory Protection | NIOSH-approved dust respirator (N95 or better) when dust concentrations may exceed OELs. |
| Hygiene | Wash hands and exposed skin thoroughly after handling. Do not eat, drink, or smoke in work areas. |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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| Physical State | White crystalline or granular powder | Vapor Density | Not applicable |
| Odor | Odorless | Specific Gravity | 3.97 g/cm ³ (bulk density varies by grade) |
| pH | Amphoteric; ~9–10 (aqueous suspension for activated form) | Solubility in Water | Very slightly soluble in water; slowly soluble in acids and alkalis |
| Melting Point | 3,762°F (2,072°C) | Pore Volume | Typically 0.3–0.5 mL/g (activated grade) |
| Flash Point | Not applicable (non-combustible solid) | Surface Area | Typically 150–350 m ² /g (BET, activated grade) |
| Flammability | Not flammable | Particle Size | Varies by grade — confirm with supplier specification |
| Vapor Pressure | Not applicable (solid) | Molecular Formula | Al ₂ O ₃ / 101.96 g/mol |

SECTION 10: STABILITY AND REACTIVITY

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| Reactivity | Stable under normal conditions. |
| Chemical Stability | Stable under recommended storage conditions. |
| Hazardous Polymerization | Will not occur. |
| Conditions to Avoid | Moisture, strong acids, strong bases, chlorine trifluoride. |
| Incompatible Materials | Chlorine trifluoride (reacts violently), hydrofluoric acid, strong acids, strong alkalis (alumina is amphoteric — slowly soluble in both). |
| Hazardous Decomp. Products | None under normal conditions. At very high temperatures (>2000°C) may form aluminium vapor. |

SECTION 11: TOXICOLOGICAL INFORMATION

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| Routes of Exposure | Inhalation (primary), skin contact, eye contact, ingestion. |
| Acute Toxicity | Low acute toxicity. No LD50/LC50 data available for standard routes. LD50 (oral, rat): >2,000 mg/kg (estimated, essentially non-toxic by ingestion). |
| Skin/Eye Effects | Dust causes mechanical irritation. Skin irritation may occur with prolonged contact. Not a sensitizer. |
| Carcinogenicity | Not listed as a carcinogen by IARC, NTP, or OSHA. Not classified as carcinogenic under GHS. |
| Reproductive Toxicity | Not expected to cause reproductive or developmental effects. |
| Chronic Effects | Prolonged inhalation of high dust concentrations may cause lung irritation. Follow dust control best practices. |

SECTION 12: ECOLOGICAL INFORMATION

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| Ecotoxicity | Not classified as environmentally hazardous. Inorganic mineral — no significant aquatic toxicity expected at normal concentrations. |
| Persistence/Degradability | Not biodegradable. Chemically stable inorganic material. |
| Bioaccumulative Potential | Not bioaccumulative. |

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| Mobility in Soil | Very low mobility — insoluble solid with low leaching potential. |
| Other Adverse Effects | None known. |

SECTION 13: DISPOSAL CONSIDERATIONS

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| Disposal Methods | Unused material may be disposed of in a licensed sanitary landfill. Not a RCRA-listed hazardous waste. Used/spent material may require characterization before disposal depending on contaminants adsorbed. Dispose in accordance with all applicable local, state, and federal regulations. |
| Contaminated Packaging | Empty containers may retain product residue. Take to an approved waste handling site for recycling or disposal. |
| Waste Code | Determine in consultation with user, producer, and licensed waste disposal company per 40 CFR 261. Unused product is not considered a RCRA hazardous waste. |

SECTION 14: TRANSPORT INFORMATION

| | DOT (USA) | IATA (Air) | IMDG (Sea) |
|-------------------|------------------|-------------------|-------------------|
| UN Number | Not regulated | Not regulated | Not regulated |
| Proper Ship. Name | Not regulated | Not regulated | Not regulated |
| Hazard Class | N/A | N/A | N/A |
| Packing Group | N/A | N/A | N/A |
| Marine Pollutant | No | N/A | No |

SECTION 15: REGULATORY INFORMATION

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| OSHA HazCom | Not classified as hazardous per 29 CFR 1910.1200. SDS provided as a courtesy. |
| SARA 311/312 | SARA 311/312: Immediate (Acute) Health Hazard category (dust inhalation). SARA 313: Not regulated. |
| SARA 313 (TRI) | Not regulated. |
| CERCLA | Not listed. |
| TSCA | Listed on TSCA Inventory (active). No Section 12(b) export notification required. |
| California Prop. 65 | Not listed under California Proposition 65 as a carcinogen or reproductive toxin. |
| State RTK | Listed in Massachusetts, New Jersey, Pennsylvania, Florida, and Rhode Island Right-to-Know substance lists. |
| International | Listed on applicable international chemical inventories. Contact Cannagas Supply for details. |

SECTION 16: OTHER INFORMATION

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| Issue Date | March 2026 |
| Revision Date | March 2026 |
| Version | 1.0 |
| Prepared By | Cannagas Supply |
| Key Sources | GHS Purple Book (Rev. 9); OSHA HazCom 2012; Thermo Fisher Scientific SDS (Alumina, rev. Dec 2025); Spectrum Chemical SDS (Activated Alumina, 2019); AluChem SDS (Calcined Alumina, 2016); ACGIH TLVs; NIOSH Pocket Guide. |
| H-Phrase Text | Not applicable — product not classified as hazardous under GHS. |

DISCLAIMER: The information in this Safety Data Sheet is believed to be accurate and represents the best information currently available to Cannagas Supply. This SDS is provided in good faith without warranty of any kind. Users are responsible for determining the suitability of this product for their specific application and for compliance with all applicable laws and regulations. This document is not a specification sheet.