



Safety Data Sheet

Activated Alumina

Adsorbent Desiccant



Section 1 – Product and Company Information

Date: September 11, 2015 Rev. E

Product Name: Activated Alumina (1/8", 1/4", 3/16", 1/2" and Granular)
Chemical Family: Aluminum oxide
Catalog Numbers: 33-0237, 33-0238, 33-0239, 33-0240, 33-0241, 33-0242, 33-0266, 33-0267, 33-0268, 33-0281, 33-0320, 33-0321, 33-0350, 33-0367, 33-0370, 33-0371, 33-0372, 33-0373, 33-0268, 33-0401, & 33-0402

Product Use: Industrial: Adsorbent used to reduce moisture content of Compressed Natural Gas, Compressed Air and other Compressed Gasses

Company Identification: Van Air Systems / Van Gas Technologies
 2950 Mechanic Street, Lake City, PA USA
 16423-2095
 E-mail: info@vanairsystems.com
www.vanairsystems.com / www.vangastech.com

Emergency Telephone Number: 800-840-9906
Customer Service Telephone Number: 814-774-2631

Section 2 – Hazard Identification

Color: White to tan-white
Physical state: Solid beads or granules
Odor: Odorless
Emergency Overview: Avoid excess contact with skin and eyes. Avoid breathing dust. Wash thoroughly with soap and water after handling.

Signal Word: Warning!
Hazard Pictogram:



Potential Health Effects: May cause mild skin, eye and/or respiratory irritation.

Health Hazards (acute and chronic): None known.
Carcinogenicity: Not available
NTP: Not available
IARC Monographs: Not available

Signs and Symptoms of Exposure: Skin dryness due to desiccant action. Ingestion of large amounts may cause vomiting, diarrhea and prostration.

Section 3 – Composition / Information on Ingredients

Component	CAS NO.	% Compound
Aluminum Oxide (Al ₂ O ₃)	1344-28-1	> 94%
Sodium Oxide (Na ₂ O)	1313-59-3	< 0.35%
Silicon Dioxide (SiO ₂)	60676-86-0	< 0.015%
Water (H ₂ O)	7732-18-5	<6%
Loss on Ignition (1000°C)		6.0%

EINECS Number: 215-691-6

- 1) Hazardous / Dangerous ingredients: None
- 2) Activated Alumina does not contain any substances found on the following EPA regulations:

- a. "Extremely Hazardous Substances"
- b. "CERCLA Hazardous Substances"
- c. "Toxic Substances"

Section 4 - First Aid Measures

General:	No special measures required.
Eyes:	Flush with water for several minutes.
Skin:	Remove contaminated clothing / shoes. Wash with soap and water. Treat for dry skin or mild irritation.
Inhalation:	Move person to fresh air. If irritation persists, consult a Physician.
Ingestion:	If symptoms exist consult a Physician.
Note to Physician:	Treat symptomatically and supportively.

Section 5 – Fire Fighting Measures

Flammable Properties:	Non-flammable
Flash Point:	Not applicable.
Method Used:	Not applicable
Flammability Limits:	Not applicable.
LEL:	Not applicable.
UEL:	Not applicable.
Fire Fighting Instructions:	Non-combustible.
Extinguishing Media:	Not applicable.
Unusual Fire and Explosion Hazards:	Chlorine Trifluoride reacts violently with Aluminum Oxide producing a flame.

Section 6 – Accidental Release Measures

Small/Large Spills:	Sweep, shovel or vacuum for disposal per local, state and federal requirements or reuse.
Waste Disposal Method:	Treat as ordinary non-combustible solid waste. Dispose of per local, state and federal requirements.

Section 7 – Handling and Storage

Handling:	Beads and granules are non-toxic. Minimize dust generation and use with adequate ventilation. NIOSH respiratory protection as needed for nuisance dust. Clean up any spills (trip and fall hazard) Wash thoroughly after handling.
Storage:	Store in cool dry place. Keep containers tightly closed since material is hygroscopic. Repair damaged containers.

Section 8 – Exposure Controls and Personal Protection

Engineering controls:	Provide good general and local ventilation. Immediate work area should be equipped with eye wash station.
Exposure Limits:	OSHA Inhalation Respirable fraction PEL 15 (mg/m ³) REL 5 (mg/m ³) ACGIH Inhalation Respirable fraction TLV 1 (mg/m ³)
Personal Protective Equipment (PPE)	
Respirators:	Use NIOSH or EN 149 approved respirator if dust cannot be controlled.
Hands and Feet:	Rubber gloves and chemical / slip resistant safety shoes. Recommended

Eye Protection:	Safety glasses with side shields or chemical safety goggles.
Other Protective Clothing & Equipment:	Clean, body-covering skin protecting clothing is recommended.
Work/Hygienic Practices:	Wash thoroughly with soap and water after handling.

Section 9 – Physical and Chemical Properties

Appearance and Odor:	White to tan-white solid beads or granules, odorless.
Bulk Density:	42 - 44 lbs/cubic foot
Vapor Pressure (mm Hg):	Not applicable.
Melting Point:	Not applicable.
Vapor Density (Air=1):	Not applicable.
Solubility in Water:	Insoluble.
Evaporation Rate (Butyl Acetate=1):	Not applicable.
Boiling Point:	> 2050°C

Section 10 – Stability and Reactivity

Stability (Conditions to avoid):	Stable under normal temperatures and pressures.
Decomposition Products:	Not available
Incompatibility (Materials to avoid):	Contact with water may produce heat
Hazardous Polymerization:	Not available

Section 11 – Toxicological Information

Toxicity to Animals:	LD50: Not available. LC50: Not available.
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Special Remarks on Toxicity to Animals: Not available.

Chronic Effects on Humans:

Carcinogenic Effects: A4 (Not classifiable for human or animal.) by ACGIH.

TERATOGENIC: Classified None for humans.

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact, ingestion, or inhalation.

Special Remarks on Chronic Effects on Humans: Not available

Special Remarks on other Toxic Effects on Humans: Not available.

Acute/Chronic Potential Health Effects: No effects known

Eyes: Severe dust may cause eye irritation.

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

NTP (National Toxicology Program)

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

US EPA Waste Number: Not regulated.

Section 12 - Ecological Information

Environmental Fate:	No data available
Eco-toxicity:	No data available

Section 13 – Disposal Considerations

Waste Disposal: All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. The information presented here pertains only to the product as shipped in its intended condition as described in SDS section 3.

EPA Waste Number: Not Applicable.

Section 14 – Transport Information

U.S. Department of Transportation (D.O.T.) Not regulated as dangerous goods.
 Sea Transport (IMDG): Not classified as a dangerous good under transportation regulations.
 IATA: Not regulated as dangerous goods. Per IATA DGR
 Transportation of Dangerous Goods (TDG – Canada)
 Class: Not Regulated
 Group: Not Regulated
 PIN Number: Not Regulated

Other: Secure product with suitable hold down devices during shipment in dry containers (avoid moisture).

Section 15 – Regulatory Information

OSHA Hazard Communication Standard: This product is a “Non-Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Federal and State Regulations:

Illinois toxic substances disclosure to employee act: Aluminum oxide Rhode Island RTK hazardous substances: Aluminum Oxide Minnesota: Aluminum oxide Massachusetts RTK: Aluminum oxide New Jersey: Aluminum oxide New Jersey spill list:
 Aluminum oxide California Director's list of Hazardous Substances: Aluminum oxide TSCA 8(b) inventory: Aluminum oxide
 SARA 313 toxic chemical notification and release reporting: Aluminum oxide
 Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.
 Other Classifications:
 WHMIS (Canada): Not controlled under WHMIS (Canada).
 DSCL (EEC):
 R36/38- Irritating to eyes and skin. S2- Keep out of the reach of children. S46- If swallowed, seek medical advice and show this SDS or product label

Section 16 – Other Information

HMIS RATING (estimated)- Health: 1 Flammability: 0 Reactivity: 0

NFPA RATING (estimated)- Health: 1 Flammability: 0 Reactivity: 0

Personal Protective Rating: B Legend: N.A. – Not Applicable, N.E. – Not Established, N.D. - Not Determined.

Recommended Uses and Restrictions: This product is designed to be used as a desiccant material for compressed air and gas. If your intended use is consistent with our stated uses(s), contact our technical sales department.

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