Sorbtech

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SDS
Safety Data Sheet

Form #: STI-136 Date: revision 000 02/28/2025

Section 1. PRODUCT IDENTIFICATION

Product Identifiers
Product Name: Promoted Activated Alumina
CAS number: 24623-77-6
EC number: 246-368-8
Product Part Numbers: 88058.

Relevant identified uses of the substance or mixture and uses against
Synonyms: Aluminum hydroxide oxide, Activated Alumina.
Recommended use: Chromatography, Laboratory chemicals, Synthesis of substances
Uses advised against: No information available

Details of the Supplier of the Safety Data Sheet:
Company: Sorbent Technologies
5955 Peachtree Corners East
Norcross, GA 30071 USA
Emergency Telephone Number: 1-866-767-2832

Section 2. HAZARD IDENTIFICATION

United States**:** According OSHA 29 CFR 1910.1200 HCS

GHS Classification of the Substance or Mixture including Precautionary Statements:
Not a hazardous substance or mixture according to Globally Harmonized System (GHS).

GHS Label Elements, including Precautionary Statements: None required.
Not a hazardous substance or mixture according to Globally Harmonized System (GHS).
Signal word: None

Hazard statement: Precautionary Statement:
Prevention: P261: Avoid breathing dust/fume.
P264: Wash thoroughly after handling.
Response: P304: IF INHALED: Remove to fresh air.
P314: IF IN EYES: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage: P402: Store in a dry place.
P404 Store in a closed container.
Disposal:: P501: Dispose of waste and residues including containers in accordance with local authority requirements.

Other Hazards Not Otherwise Classified (HNOC): None identified

Supplemental Information: Results of PT and vPvB assessment:
PBT: Not applicable
vPvB: Not applicable

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization:: Substances

Ingredient	CAS No.	EC No.	%
Aluminum Hydroxide Oxide	24623-77-6	246-368-8	60— 90%
Rare Earth Oxides	68188-83-0	269-164-0	0.0—10%
Titanium Dioxide	13463-67-7	236-675-5	0.0—3%
Iron Oxide	1309-37-1	215-168-2	0.0—3%

Synonyms: Aluminum Hydroxide Oxide, Activated Alumina.

Section 4. FIRST AID MEASURES

Description of First Aid Measures
General Advice: Move out of dangerous area.
Skin contact: Wash material off skin with soap and water. Seek medical attention if irritation occurs.
Eye contact: Flush with copious amounts of water for 15 minutes. Seek medical attention if irritation occurs.
If ingested: Give one or two glasses of water to drink. Seek medical attention if gastrointestinal symptoms develop.
If inhaled: Remove to fresh air. Seek medical attention if cough or respiratory symptoms develop.
Most Important Symptoms and Effects, both acute and delayed:
No information available
Indication of any immediate medical attention and special treatment needed: No information available.
Notes to Physician: Treat symptomatically

Section 5. FIRE-FIGHTING MEASURES

Extinguishing Media
Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable Extinguishing Media: Not applicable
Flash Point: Not applicable
Non-flammable: OSHA Method 16CFR1500.44 (Incorporated by reference in 29CFR1920.1200).
Special hazards arising from the substance or mixture: aluminum oxide
Advice for Firefighters:
General Hazard: Not considered to be a fire hazard.
Fire Fighting Instructions: Isolate large fires and allow to burn out. Extinguish fire using water fog, fine water spray, carbon dioxide or foam. Avoid stirring up dust clouds.
Fire Fighting Equipment Fire fighting personnel should wear full protective equipment, including self-contained breathing apparatus (SCBA) for all inside fires and large outdoor fires.
Hazardous Combustion Products: Under certain conditions, any airborne dust be an explosion hazard. Hazard greater as fineness increases.
Special Fire Hazard: Chlorine trifluoride reacts violently with Alumina producing a flame.
NFPA rating: Health: 0, Flammability: 0, Reactivity: 0,

Section 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures
Avoid dust formation. Avoid breathing vapors, mist or gas.
Environmental Precautions
No special environmental precautions required.
Methods and Material for Containment and Clean-up
If a Spill or Leak Occurs: Clean up spills in a manner that does not disperse dust into the air. Handle in accordance with industrial hygiene and safety practices. These practices include avoiding unnecessary expo sure, and removal from eyes, skin, and clothing. Prevent product from entering drains.
Disposal Method: Sweep up and shovel into suitable contains for disposal. Dispose in a facility for non-hazardous wastes. Spent should be disposed of in accordance with State and Federal laws.
Container Disposal: Do not reuse empty bags or drums. Dispose of used bags in facility permitted for non-hazardous wastes.
Reference to other sections: For disposal see section 13.

Section 7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling: Avoid prolonged contact with eyes and skin. Do not breath dust. Keep away from ignition sources. Use in well ventilated areas. Protect containers from physical damage. Wash hands after handling.

Conditions for Safe Storage, Including any Incompatibilities

Storage: Store in cool, dry, ventilated area and in closed containers. Keep away form oxidizers, heat or flames. Store away form ignition sources. Do not store above 24 deg. C. Strongly hygroscopic.
Storage class (TRGS 510): Non-combustible Solids

Specific End Use(s):

No other specific uses are stipulated.

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region regulatory bodies.

Component	OSHA PEL	ACGIH TLV
Aluminum hydroxide oxide (24623-77-6)	10 mg/m3 TWA respirable fraction 5 mg/m3	1 mg/m3 as Al TWA
Rare earth oxides (68188-83-0)	15 mg/m3	10 mg/m3 8 hr. TWA
Titanium dioxide (13463-67-7)	15 mg/m3	2 mg/m3 TWA
Iron oxide (1309-37-1)	5 mg/m3	5 mg/m3 TWA

ACGIH is the American Conference of Governmental Industrial Hygienists
OSHA is the Occupational Safety and Health Administration
PEL is the Permissible Exposure Limits established by OSHA.
TLV is the Threshold Limit Value a term ACGIH uses to express the maximum airborne concentration of a material to which most workers can be exposed during a normal daily and weekly work schedule without adverse effects.

Exposure Controls

Appropriate Engineering Controls: Use local exhaust to control emissions near the source. Ventilation systems should be configured to prevent exceeding the recommended or regulated exposure limits (i.e. OSHA PELs).
Eye Protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Safety glasses with side shields are recommended for any type of handling. Where eye contact or dusty conditions may likely, dust tight goggles are recommended. Have eye washing equipment available.
Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Avoid skin contact with this product. Wear appropriate dust resistant clothing. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.
Full contact material: Nitrile rubber of minimum layer thickness 0.11 mm and break through time 480 minutes.
Body protection: Choose protection in relation to its type, to the concentration and the amount of any dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and of the amount of any dangerous substances at the specific workplace.
Respiratory Protection: Follow the OSHA respiratory regulations found in 29 CFR 1910.134 or European Standard EN149. Keep dust exposure to a minimum with engineering and administrative controls.
Use appropriate NIOSH/MSHA approved particulate respirators if necessary. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Use type N95 (US) or type P1 (EN 143) dust masks for nuisance levels of dust.

General Industrial Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.

Environmental Exposure Controls

No special environmental precautions required.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State:	Solid
Appearance:	White powder
Odor:	Odorless
Odor Threshold:	No data available
pH:	5.0—6.0 at 20 deg C (68 deg. F)
Melting Point/Range:	No data available
Boiling Point/Range:	No data available
Flash Point:	Not applicable
Evaporation Rate:	No information available
Flammability (solid, gas);	Product is not flammable
Flammability or Explosive Limits	
Upper:	No data available
Lower:	No data available
Vapor Pressure:	No data available
Vapor Density:	No information available
Density:	2.000 g/cm3 (water =1) at 20 deg C (68 deg. F)
Relative density	No data available
Solubility:	Slightly soluble in water
Partition Coefficient; n-octanol/water:	No data available
Autoignition Temperature:	No information available
Decomposition Temperature:	No information available
Viscosity:	No information available
Explosive properties:	Not explosive
Oxidizing properties:	Not an oxidizer
Other Safety Information:	No data available

Section 10. STABILITY AND REACTIVITY

Reactivity
None known based on the information available.
Chemical Stability
This product is stable under the specified conditions of storage, shipment and use.
Possibility of Hazardous Reactions
No data available.
Conditions to Avoid
No data available.
Incompatible Materials
Contact with strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc. may result in rapid combustion.
Hazardous Decomposition Products
Thermal decomposition can lead to release of irritating gases and vapors such as aluminum oxide.

Section 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Aluminum hydroxide oxide	>10,000 mg/kg (rat)	No effect	>2.3 mg/l 4h (rat)
Rare earth oxides	>5,000 mg/kg (rat)	No data	No data
Titanium dioxide	>25,000 mg/kg (rat)	>10,000 mg/kg (rabbit)	>6.8 mg/l 4h (rat)
Iron oxide	>10,000 mg/kg (rat)	No data	No data

Toxicologically Synergistic Products: No information available .
Delayed and Immediate Effects as well as Chronic Effects from Short and Long Term Exposure
Skin corrosion/irritation: Skin—Rabbit, Result: No skin irritation –24hr. (OECD Test Guide 404)
Serious eye damage/eye irritation: Eyes—Rabbit, Result: Slight eye irritation (OECD Test Guide 405)
Respiratory or skin sensitization: Draize test—Guinea pig, Result: Does not cause skin sensitization.
Germ cell mutagenicity: No data available. Ames test, Bacillus subtilis, Result: negative (IUCLID)

Carcinogenicity: Table below indicates if each agency has listed any ingredient as a Carcinogen.

Component	CAS-No.	IARC	NTP	ACGIH	OSHA
Aluminum hydroxide oxide	24624-77-6	Not listed	Not listed	Not listed	Not listed
Rare earth oxides	68188-83-0	Not listed	Not listed	Not listed	Not listed
Titanium dioxide	13463-67-7	Not listed	Not listed	Not listed	Not listed
Iron oxide	1309-37-6	Not listed	Not listed	Not listed	Not listed

Reproductive Effects: No information available.
Developmental Effects: No information available.

Teratogenicity: No information available.

Specific Target Organ Toxicity (STOT)-single exposure: None known.
Specific Target Organ Toxicity (STOT)-repeated exposure: None known.

Aspiration hazard: No information available

Symptoms / Effects, Both Acute and Delayed: No information available.

Endocrine Disruptor Information: No information available.

Other Adverse Effects: The toxicological properties have not been fully investigated.
RTECS: Not available.

Section 12. ECOLOGICAL INFORMATION

Ingredient	Test	Result	Species	Exposure
Aluminum hydroxide oxide	No information available.			

Toxicity
No toxicity limit of solubility. Do not empty into drains.
Persistence/ Degradability
No information available.

Bioaccumulation Potential
Does not bioaccumulate.
Mobility in Soil
No information available.
Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Endocrine Disrupting Properties
Other Adverse Effects
No ecological problems are to be when the product is handled and used with due care and attention.

Section 13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Product: This product is not considered a hazardous waste. Vacuum or shovel material into a closed container for reuse or disposal. Storage and disposal should be in accordance with applicable local, state and federal laws and regulations.
Contaminated Packaging: Local regulations may be more stringent than state or federal requirements.
RCRA P-Series: None listed
RCRA U-Series: None listed

Section 14. TRANSPORTATION INFORMATION

Land: **DOT (US)**: Not regulated
ADR/RID (EU): Not regulated
TDG (Canada): Not regulated
Water: **IMO/IMDG**: Not regulated
Air: **IACO/IATA**: Not regulated

Special Precautions for User
No information available

Section 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations/ Legislation Specific for the Substance or Mixture
International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	PICCS	ENCS	AICS	IECSC	KECL
Aluminum hydroxide oxide	X	X	-	246-368-8	-	X	X	X	X	X
Rare earth oxides	X	X	-	269-164-0	-	X	X	X	X	X
Titanium dioxide	X	X	-	236-675-5	-	X	X	X	X	X
Iron oxide	X	X	-	215-168-2	-	X	X	X	X	X

X indicates listed

U.S. Federal Regulations

TSCA**:** All ingredients are listed on the TSCA inventory
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.
SARA Codes: CAS# 24623-77-6:
SARA 311/312 Hazardous Categorization: No SARA hazards

Acute Health Hazard:	No
Chronic Health Hazard:	No
Fire Hazard:	No
Sudden Release of Pressure:	No
Reactive Hazard:	No

SARA Section 313: CAS# 24623-77-6
Clean Air Act:
This material does not contain any hazardous air pollutants, Class 1 Ozone depletors or Class 2 Ozone depletors.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances, Priority Pollutants or Toxic Pollutants under the CWA.
OSHA: Not applicable
CERCLA: Not applicable

U.S. Department of Transportation (DOT)

Reportable Quantity (RQ): No
DOT Marine Pollutant: No
DOT severe Marine Pollutant: No

U.S. Department of Homeland Security (DHS)

This product does not contain any DHS chemicals.

States Right-to-Know

Aluminum hydroxide oxide CAS# 24623-77-6
California Prop 65: Not listed. This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.
Massachusetts: Listed.
New Jersey Right to Know: Not listed.
Pennsylvania: Not listed.
Florida: Not listed
Rhode Island: Not listed.
Illinois: Not listed.
Connecticut - Hazardous Air pollutants: Not listed

Canadian Classification

WHMIS: Non-controlled.
DSL : Listed.

EEC Council Directives relating to the classification, packaging, and labeling of dangerous substances and preparations.

Risk and Safety Phrases:
S2: Keep out of reach of children,,
S46: If swallowed, seek medical advice immediately and show this on the container or label.

Mexico—Grade

No information available.

Section 16. OTHER INFORMATION

HMIS Rating (USA):

Health Hazard:	1
Chronic Health Hazard:	*
Flammability:	0
Physical Hazard:	0
Personal Protection:	E (safety glasses, gloves, dust respirator)

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SDS REVISION SUMMARY:
This document has been updated to comply with the U.S. OSHA HazCom 2012 Standard replacing the current Legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)