

**MATERIAL SAFETY DATA SHEET**
**▶ SECTION 1 – IDENTIFICATION**

Product Name : Activated Alumina  
 Appearance and odorless : White powder or beads  
 Identified Uses : Manufacturer & Supplier  
 Synonyms : Adsorbent, Desiccant, Catalyst  
 Chemical Name : Aluminium Oxide  
 Chemical Formula : Al<sub>2</sub>O<sub>3</sub>  
 Emergency Telephone Number : 1800-233-2688  
 Supplier : Starke Aquacare Technologies  
 Address : 17 Najafgarh Road New Delhi India 110015  
 Telephone Number : 91-11-47009571  
 Fax Number : 91-11-47009570  
 E-mail : info@starkfiltermedia.com

**▶ SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS**
**Composition:**

Name	Cast#	Ld50	Ld50	ED Directive		Concentration
				Symbol	R Phrases	
Aluminium Oxide	1344-28-1	Unknown	Unknown	None	None	93-95%
Moisture	7732-18-5	None	None	None	None	3-5%

**▶ SECTION 3: HAZARDS IDENTIFICATION**
**Non-hazardous.**

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

#### ▶ SECTION 4: FIRST AID MEASURES

**Eye contact:** Flush eyes thoroughly with water, taking care to rinse under eyelids. If irritation persists, continue flushing for 15 minutes, rinsing from time to time under eyelids. If discomfort continues, consult a physician. Do not scrub, since the abrasion may cause irritation.

**Skin contact:** Wash skin thoroughly with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

**Inhalation:** If overcome by high dust concentrations, remove to a ventilated area.

**Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie or belt. Get medical attention if symptoms appear.

#### ▶ SECTION 5: FIRE FIGHTING MEASURES

**Extinguishing media:** Use fire fighting measures that suit the environment.

**Hazardous combustion:** Wear self-contained respiratory protective device. Wear fully protective suit.

#### ▶ SECTION 6: ACCIDENTAL RELEASE MEASURES

**Person-related safety precautions:** Wear protective clothing.

**Measures for environmental protection:** No special measures required.

**Measures for cleaning/collecting:** Clean up using dry procedures; avoid dusting.

**Additional information:** No dangerous substances are released.

#### ▶ SECTION 7: HANDLING AND STORAGE

**Handling precautions:** Avoiding generating dust during handling. Ensure good ventilation/exhaust at the workplace. Prevent formation of dust.

**Storage conditions:** Keep material dry. Storage in one common storage facility is not required.

## ▶ SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Provide general and local ventilation to maintain concentrations of air contaminants below recommended standards. Wear eye and respiratory protection.

**Exposure limits:** (ACGIH= American Conference of Governmental Hygienists; TLV= Threshold Limit Value; OSHA=Occupational Safety and Health Administration (USA); PEL= Permissible Exposure Limit; TWA= Time Weighted Average; STEL= Short Term Exposure Limit; Ceiling= Ceiling Value)

Aluminium Oxide	ACGIH (TLV)		OSHA (PEL)	
	TWA	STEL	TWA	STEL
Total Dust	10mg/m <sup>3</sup>	None	10mg/m <sup>3</sup>	None
Respirable Dust	None	None	5mg/m <sup>3</sup>	None

## ▶ SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Off-white spherical	Flashpoint	: Not applicable
Ph	: Not Applicable	Auto ignition temp.	: Not applicable
Boiling point	: Not Available	Lower flammable limit	: Not applicable
Melting point	: 2050°C	Higher flammable limit	: Not applicable
Vapor pressure	: Not Applicable	Odor threshold	: Not applicable
Vapor density (air=1)	: Not Available	Explosive properties	: Not applicable
Evaporation rate	: Not Available	Oxidizing properties	: Not applicable
Relative density (water=1)	: Not Applicable	Partition coefficient	: Not applicable
Water solubility	: Insoluble (n-octanol/water)		

## ▶ SECTION 10: STABILITY AND REACTIVITY DATA

**Chemical stability:** A rise in temperature may result from contact with water.

**Incompatibility:** None.

**Hazardous decomposition products:** None. If used according to specifications.

**Hazardous Polymerization:** None. Non-corrosive

## ▶ SECTION 11: TOXICOLOGICAL INFORMATION

### Routes of exposure

**Inhalation:** Yes

**Ingestion:** No

**Skin contact:** No

**Skin adsorption:** No

**Eye contact:** Yes

### Acute Effects

**Inhalation:** Inhalation of high concentrations of these inert nuisance particulates can result in mild irritation of the respiratory tract.

**Ingestion:** Not applicable.

**Skin contact:** May cause irritation through mechanical abrasion.

**Eye contact:** May cause irritation through mechanical abrasion.

### Chronic Effects

**Medical conditions aggravated by exposure to the product:** Not applicable.

**Carcinogenicity / Mutagenicity / Reproductive toxicity:** One of the ingredients present at concentrations equal to or greater than 0.1% are listed as carcinogen or potential carcinogen by LARC, NTP or OSHA, (LARC= International Agency for Research on Cancer; NTP=National Toxicology Program (USA); OSHA=Occupational Safety and Health Administration (USA))

**Supplementary information:** Activated alumina may adsorb certain gases and liquids. While alumina itself is principally inert, it may exhibit properties of the adsorbed material.

## ▶ SECTION 12: ECOLOGICAL INFORMATION

No effects are expected from this insoluble product because insolubility leads to non-bioavailability.

## ▶ SECTION 13: DISPOSAL INFORMATION

Check for recycling, if possible.

This substance is inert and does not require special disposal methods.

Dispose of waste in accordance with federal, state, or local regulations.

▶ **SECTION 14: TRANSPORT INFORMATION**

**TDGR (Transport of Dangerous Goods Regulations) (Canada):** Not classified as a dangerous goods under transport regulations.

**CFR 49 (Code of Federal Regulations) (USA):** Not classified as a dangerous goods under transport regulations.

**IMO (International Maritime Organization):** Not classified as a dangerous goods under transport regulations.

**ICAO (International Civil Aviation Organization):** Not classified as a dangerous goods under transport regulations.

**IATA (International Air Transport Association):** Not classified as a dangerous good under transport regulations.

▶ **SECTION 15: REGULATORY INFORMATION**

**WHMIS Classification (Canada):** Not controlled

**EFC Classification (Canada):** Not classified

**Warning symbol:** None

**Warning word:** None

**Risk phrases:** None

**Safety phrases:** None

**USA REGULATIONS:**

**Section 313 Supplier Notification**

This product contains no chemical in concentrations subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (Title III of SARA) and of 40 CFR 372.

**TSCA-DSL (USA-Canada)**

This substance or all the ingredients of these products are on the Domestic Substance List (DSL – Canadian Environmental Protection Act (Canada) as well as a Chemical Substance Control Act (TSCA inventory (USA)). The presence on these lists does not require any legal reporting.



▶ **SECTION 16: OTHER INFORMATION**

**National Fire Protection Agency (NFPA) codes** (Health, Flammability, and Reactivity): 0, 0, 0

**Hazardous Material Information Systems (HMIS) codes** (Health, Flammability, and Reactivity): 0,  
0, 0

**Abbreviations:**

CAS #= Chemical Abstracts Service Registry Number, EC= European Community; LD50= Lethal dose 50%; LC50=Lethal concentration 50%; LCL0= lowest published lethal concentration.

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