



# Material Safety Data Sheet

## Zirconia Fused Alumina

Revision Date: July 24, 2021

### Section 1-Chemical Product and Company Identification

**MSDS Name:** Zirconia fused Alumina

#### Company Identification:

ZHENGZHOU HAIXU ABRASIVES CO.,LTD

ADD: Yaxing Times Plaza, South Songshan Road, Erqi District, ZhengZhou City, Henan Province, CHINA

**Emergency number:** +86-371-60900389 /+86 13526538098

**Information number:** +86-371-60305637

### Section 2 – Composition, Information on Ingredients

Item#	AL <sub>2</sub> O <sub>3</sub>	ZrO <sub>2</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>
	>70%	23-27%	<0.4%	<0.4%	<0.3%
ZA25	1344-28-1	64417-98-7	14808-60-7	98084-96-9	1309-37-1
	>56%	38-42%	<0.1%	<0.2%	<0.3%
ZA40	1344-28-1	64417-98-7	14808-60-7	98084-96-9	1309-37-1

### Section 3 – Hazards Identification

#### EMERGENCY OVERVIEW

**Eye:** May irritate eyes.

**Skin:** Not absorbed through the skin. May cause abrasions.

**Ingestion:** No known adverse effects, but ingestion not recommended.

**Inhalation:** May cause coughing or shortness of breath.

**Chronic Effects:** May affect breathing capacity.



## **Section 4 – First Aid Measures**

**Eyes:** Flush eyes with lukewarm water or eyewash solution for 15 minutes, opening and closing eyelids to ensure adequate rinsing. If redness, irritation, pain, or tearing occurs, seek medical attention.

**Skin:** Wash contaminated skin area with soap and water. Obtain first aid or medical assistance if needed.

**Ingestion:** If swallowed, do not induce vomiting unless directed by a doctor. Seek medical attention.

**Inhalation:** Remove to fresh air, apply artificial respiration as needed. If breathing has stopped, a certified professional should give CPR. Get medical attention if needed.

## **Section 5 – Fire Fighting Measures**

**Flammable Properties:** Non-flammable

**Flash Point:** Not applicable.

**Fire/Explosion Hazards:** Non-flammable, non-combustible. Product will not burn.

**Upper and Lower Flammable Limits:** None

**Auto Ignition Temperature:** None

**Special Fire Fighting Procedures:** None

## **Section 6 – Accidental Release Measures**

Isolate hazard area and deny entry to unauthorized and/or unprotected personnel. Avoid dust generation. Water mist may be added as necessary to control the level of airborne dusts. Respiratory protection for clean-up personnel depends on the level of exposure anticipated. (See Section 8.EXPOSURE CONTROLS / PERSONAL PROTECTION)  
Gently shovel or scoop into clean dry container for later recycling or disposal. Comply with Federal, State and Local regulations regarding reporting of spills and disposal.



## **Section 7 – Handling and Storage**

**Handling:** Prevent formation of dust, and avoid dust inhalation. Use only in well ventilated areas. Any deposit of dust that cannot be avoided must be regularly removed. DO NOT use compressed air or dry sweeping to remove dust from work area. Wash thoroughly with plenty of water.

**Normal Storage:** Store in dry area in closed containers. Protect from high humidity and water. Store receptacle in a well ventilated area. Store away from oxidizing agents. Store away from food stuffs.

## **Section 8 – Exposure Control, Personal Protection**

**Respiratory Protection:** Under normal working conditions, below acceptable exposure guidelines, none is required. For concentrations above the PEL but less than 10X the PEL, a NIOSH/MSHA approved dust mist respirator should be worn. Appropriate respirator selection will be dependent upon the magnitude of exposure and should be selected in accordance with 29 CFR 1910.134. (See Section 2. COMPOSITION for PEL's and TWA's).

**Skin Protection:** Wear protective gloves, as needed, to prevent skin contact.

**Eye protection:** Wear safety glasses with side shields or goggles to prevent dust and particles from entering the eye. See OSHA 29 CFR 1910.133.

**Other:** Under dusty conditions, employees should wear coveralls or other suitable work clothing. Contaminated clothing must be vacuumed before removal. DO NOT REMOVE dust from clothing by blowing or shaking.

**Engineering Controls:** Use general ventilation. Local exhaust may be necessary for processes, which generate large quantities of airborne dust. Keep exposures below applicable OSHA PEL's and ACGIH-TLV's.



## **Section 9 – Physical and Chemical Properties**

**Formula:** Al<sub>2</sub>O<sub>3</sub>

**Appearance:** Gray or dark gray

**Odor:** Odorless

**PH:** 7-9

**Boiling Point:** /

**Melting Point:** 2250 °C

**Flash Point:** None

**Explosive Properties:** None

**Oxidizing Properties:** None

**Vapor Pressure:** N/A

**Vapor Density:** N/A

**Specific Gravity:** 4.10 g/cm<sup>3</sup>

**Water Solubility:** Insoluble

**Solubility Other Solvent:** Partially soluble in HF

## **Section 10 – Stability and Reactivity**

**Stability:** Stable under normal ambient conditions of temperature and pressure.

**Reactivity/ Incompatibility:** Aluminum Oxide reacts violently with chlorine trifluoride producing flames. Ethylene Oxide polymerizes violently when in contact with pure aluminum oxide. Aluminum oxide is also incompatible with hot chlorinated rubber, acids and oxidizers.

**Hazardous Decomposition:** Thermal decomposition products will produce aluminum oxide.

**Hazardous Polymerization:** Will not occur.



## **Section 11 – Toxicological Information**

**Eye:** Particulate matter may cause physical injury to the eye.

**Skin:** May cause minor irritation.

**Inhalation:** May cause minor transient respiratory irritation.

**Ingestion:** Ingestion of large quantities may result in gastrointestinal irritation and eventually interference with phosphate absorption, which results in rickets. Chronic: Many studies indicate that aluminum oxide dust acts as an “inert” material when inhaled.

**Sub-chronic:** No data.

**Other:** Implantation of aluminum oxide into rats has resulted in tumors at the site of application. Intrapleural administration of 90mg/kg aluminum oxide has resulted in tumors of the lungs, thorax or respiratory system.

## **Section 12 – Ecological Information**

**Aquatic Toxicity:** Generally not hazardous for water.

**Persistence & Degradability:** Inorganic. Is not eliminable from water by means of biological cleaning processes.

**Bioaccumulative Potential:** Does not accumulate in organisms.

**Mobility In Soil:** No further relevant information available.

## **Section 13 – Disposal Consideration**

Approved landfill in accordance with all local, state and federal regulations.

## **Section 14 – Transport Information**

**14.1 UN Number :**

**ADR/RID, IMO/IMDG, IATA** Not regulated as dangerous goods.

**14.2 UN proper shipping name:**

**ADR/RID, IMO/IMDG, IATA** Not dangerous goods

**14.3 Transport hazard class(es):**



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**ADR/RID, IMO/IMDG, IATA** Not regulated as dangerous goods.

**14.4 Packing group:**

**ADR/RID, IMO/IMDG, IATA** Not regulated as dangerous goods.

**14.5 Environmental hazards:** No.

**14.6 Special precautions for user :** No information available.

## **Section 15 –REGULATORY INFORMATION**

NOT APPLICABLE

## **Section 16 –NOTICE**

This SDS summarizes, to our best knowledge at the date of issue, the chemical, health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since we cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. If clarification or further information is needed, the user should contact us at the contact details on page 1.