# Zirconia Fused Alumina

# MATERIAL SAFETY DATA SHEET

Date: 2023-02-11 CAS # 1344-28-1

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#### 1. Product and Company Identification

Manufacturer/Supplier:

Zhengzhou Haixu Abrasives Co., Ltd

Tel: 0086-371-63211283 Fax:0086-371-60305637

Product Name: Zirconia Fused Alumina

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#### 2. Composition / Information on Ingredients

product	AlO3	ZrO2	TiO2	Fe2O3	SiO2
ZA25	68%-72%	24%-30%	1.5%max	0.5%max	1.0%max
ZA40	55%-57%	35%-44%	1.5%max	0.5%max	1.0%max

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#### 3. Hazards Identification

#### **Emergency Overview:**

Grey spheres, grain and/or powder with no odor. Inhalation of high concentrations of dusts of this substance may cause eye and upper respiratory tract irritation. This material is not flammable and does not support combustion. Primary routes of entry are inhalation, skin contact and eye contact.

Ingestion: May cause mild irritation.

Inhalation: May cause upper respiratory tract irritation.

**Eye Contact:** May cause mild irritation. **Skin Contact:** May cause mild irritation.

**Hazard Description** 

Medical conditions generally aggravated by exposure

Asthma, chronic lung conditions or diseases and skin rashes.

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#### 4. First Aid Measures

Ingestion: No toxic effects, treat symptomatically and seek medical advice as necessary.

Inhalation: No toxic effects. Classified as nuisance material.

**Eye Contact:** 

# Zirconia Fused Alumina

Sharp particles can cause irritation.

Flush with clean water and seek medical advice if irritation continues. Use suitable eye protection as required.

#### **Skin Contact:**

No harmful effects wash with soap and water.

# 5. Fire Fighting Measures

#### Fire / Explosion Hazards:

This product does not present fire or explosion hazards as supplied.

### **Extinguishing Media:**

As deemed suitable by the environment.

#### Fire Fighting Equipment:

Respiratory and eye protection required for fire fighting personnel. Full protective equipment (Bunker Gear) and self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires.

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## **Accidental Release Measures**

#### **Person-related Safety Precautions:**

Avoid contact with skin and eyes.

#### **Cleaning and Collecting Spills:**

Vacuum or sweep material and place in a disposal container. Avoid dusting. Ensure adequate ventilation.

## 7. Handling and Storage

### Handling:

Avoid creating unnecessary excess dust during handling.

#### **Storage:**

No special storage requirements – shelf life indefinite.

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## 8. Exposure Controls and Personal Information

#### **Exposure Guidelines:**

1344-28-1 Zirconia Fused Alumina (non-fibrous)

ACGIH 10mg/m3 (TWA - as Al)

OSHA PEL 15mg/m3 (TWA - total dust) 5 mg/m3 (TWA - respirable fraction)

#### **Respiratory Protection:**

Use NIOSH approved respiratory protection in case of insufficient ventilation and where exposure guidelines may be exceeded.

Skin Protection: Wear suitable gloves and long sleeve shirts to avoid skin irritation or injury.

#### **Eye Protection:**

Use of safety glasses with full side shields is always recommended. Where air turbulence may be present, goggles are also recommended.

# Zirconia Fused Alumina

# 9. Physical and Chemical Properties

**Physical and Chemical Properties:** 

Melting Point 2250°C S.G 4.30 g/cm3 Flashpoint Not applicable

Odour None
Boiling Point >1900°C
Water Solubility Insoluble
Color Grey

Hazardous decomposition Products None Hazardous reactions None

## 10. Stability and Reactivity

**Stability:** Product is stable when used in accordance with specifications.

Conditions to Avoid: Incompatible materials.

Incompatibilities with Other Materials: Reacts with chlorine trifluoride or ethylene oxide.

Hazardous Decomposition Products: None noted.

Hazardous Polymerization: Will not occur.

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## 11. Toxicological Information

Inhalation Temporary discomfort or mechanical irritation to the upper respiratory tract may occur due to inhalation of high dust concentrations. No acute effects expected

Skin contact No determined toxicological effects.

Ingestion No determined toxicological effects.

Eyes High dust concentrations may cause mechanical irritation.

Alpha Alumina 4 ( OES ) Respirable Titanium Dioxide 4 ( OES ) Respirable

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### 12. Ecological Information

#### **General Notes:**

Environmental Statement: Persistent and non-biodegradable but is unlikely to have any long term effect on the environment.

Mobility Solid. Involatile. Insoluble in water Degradability Non-biodegradable. Persistent.

Accumulation No bio-accumulation or bio-magnification identified.

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# 13. Disposal Considerations

It may be disposed of as non toxic/inactive materials in approved landfill sites in accordance with local regulations. -----

# 14. Transport Information

It is not classified as dangerous for transportation under EU or UK national regulations. No special precautions are required.

## **DOT** regulations:

# Zirconia Fused Alumina

Hazard class: None

Land transport ADR/RID (cross-border)

ADR/RID class: None

Maritime transport IMDG:

IMDG Class: None

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: None

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# 15. Regulations

Product related hazard informations:

Hazard symbols: Xi Irritant

**Risk phrases:** 36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

#### **National regulations**

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory.

**Information about limitation of use:** For use only by technically qualified individuals.

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#### 16.Other Information

The information provided in this safety data sheet is correct to the best of our knowledge information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, procession, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and is not valid for sun material used in combination with any other materials or in any process.

