

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## **alpha-Aluminium oxide powder**

Revision Date: 4/17/2024

Date Issued: 4/18/2024

Version: 2

### **1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING**

#### **1.1 Product identifier**

<b>Product name</b>	alpha-Aluminium oxide powder
<b>Product code</b>	NO-0008
<b>CAS</b>	1344-28-1
<b>REACH No.</b>	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration envisaged for a later registration deadline.

#### **1.2 Relevant identified uses of the substance or mixture and uses advised against**

<b>Identified uses</b>	Laboratory chemicals, Manufacture of substances
------------------------	---

#### **1.3 Details of the supplier of the safety data sheet**

<b>Supplier</b>	IoLiTec Ionic Liquids Technologies GmbH Im Zukunftspark 9 D – 74076 Heilbronn Germany
<b>Telephone</b>	+49 (0)7131-89839-0
<b>Fax</b>	+49 (0)7131-89839-109
<b>Email</b>	msds@iolitec.de

#### **1.4 Emergency telephone number**

<b>Emergency telephone</b>	+49 (0)151-41255671
----------------------------	---------------------

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## alpha-Aluminium oxide powder

Revision Date: 4/17/2024

Date Issued: 4/18/2024

Version: 2

## 2 HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Eye Irritation (Category 2A)

Specific Target Organ Toxicity - Single exposure: Respiratory tract irritation  
(Category 3)

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Pictogram



Signal word

Warning

#### *Hazard statements*

#### H-phrases

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

#### *Precautionary statements*

#### P phrases

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/  
spray.

P280 Wear protective gloves/ protective clothing/ eye  
protection/ face protection.

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## alpha-Aluminium oxide powder

Revision Date: 4/17/2024

Date Issued: 4/18/2024

Version: 2

P304 + P340 + P312

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 3 COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Aluminium oxide

**CAS:** 1344-28-1

Ingredient name	Contents	Classification
Aluminium oxide	99.85%	Eye Irr. 2A; STOT SE 3

**Formula**

Al<sub>2</sub>O<sub>3</sub>

**Molecular Weight**

101.96 g/mol

## 4 FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General

Contaminated clothing should be removed and washed before being reused.

#### Inhalation

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## **alpha-Aluminium oxide powder**

Revision Date: 4/17/2024

Date Issued: 4/18/2024

Version: 2

---

Move the exposed person to fresh air at once. If respiratory problems, provide artificial respiration/oxygen.

### **Ingestion**

Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention immediately.

### **Skin**

Wash the skin immediately with soap and water.

### **Eyes**

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse

### **4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

### **4.3 Indication of any immediate medical attention and special treatment needed**

No data available.

## **5 FIRE FIGHTING MEASURES**

### **5.1 Extinguishing media**

Use suitable fire-fighting measures depending on the surrounding environment.

Use: Water spray, fog or mist. Carbon dioxides (CO<sub>2</sub>). Dry chemicals, sand, dolomite etc.

### **5.2. Special hazards arising from the substance or mixture**

Avoid water in straight hose stream, will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control. Fire causes formation of toxic gases.

### **5.3. Advice for firefighters**

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## **alpha-Aluminium oxide powder**

Revision Date: 4/17/2024

Date Issued: 4/18/2024

Version: 2

Wear self-contained breathing apparatus as combustion may produce hazardous fumes.

## **6 ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective clothing and avoid inhalation of vapor, skin or eye contact.

### **6.2 Environmental precautions**

Avoid washing into water courses. Avoid contaminating public drains or water supply.

### **6.3 Methods and materials for containment and cleaning up**

Avoid contact with skin or inhalation of spillage, dust or vapor. Avoid dust formation.

Collect and reclaim or dispose in sealed containers in license waste.

### **6.4 Reference to other sections**

For disposal see section 13.

## **7 HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas.

Avoid contact with skin and eyes. Avoid ingestion and inhalation. Do not use in confined spaces without adequate ventilation and/or respirator.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store in a cool, dry and well-ventilated place. Keep container tightly closed container.

Hygroscopic.

### **7.3 Specific end use(s)**

Chemical storage.

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## **alpha-Aluminium oxide powder**

Revision Date: 4/17/2024

Date Issued: 4/18/2024

Version: 2

## **8 EXPOSURE CONTROLS AND PERSONAL PROTECTION**

### **8.1 Control parameters**

Ingredients with workplace control parameters.

### **8.2 Exposure controls**

#### **Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **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. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **Body Protection**

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## alpha-Aluminium oxide powder

Revision Date: 4/17/2024

Date Issued: 4/18/2024

Version: 2

### 9 PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Solid.
<b>Color</b>	Colorless.
<b>Odor/taste</b>	No characteristic odor.
<b>Boiling Point</b>	2980°C
<b>Melting Point</b>	2045°C
<b>Relative Density</b>	3.97 g/cm <sup>3</sup>

#### 9.2 Other safety information

No data available.

### 10 STABILITY AND REACTIVITY

#### 10.1 Reactivity

No data available.

#### 10.2 Chemical stability

Stable under normal temperatures and pressures.

#### 10.3 Possibility of hazardous reactions

Exothermic reaction with water.

#### 10.4 Conditions to avoid

No data available.

#### 10.5 Incompatible materials

Strong oxidizing agents. Acids. Bases. Halocarbons. Interhalogens.

#### 10.6 Hazardous decomposition products

No data available.

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**alpha-Aluminium oxide powder**

Revision Date: 4/17/2024

Date Issued: 4/18/2024

Version: 2

## 11 TOXICOLOGICAL INFORMATION

### 11.1 Information on hazard classes

#### Acute toxicity

No data available.

#### Skin corrosion/irritation

No data available.

#### Serious eye damage/eye irritation

No data available.

#### Respiratory or skin sensitization

No data available.

#### Germ cell mutagenicity

No data available.

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

No data available.

#### Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

#### Specific target organ toxicity - repeated exposure

No data available.

#### Aspiration hazard

No data available.

### 11.2 Information on other hazards

#### Potential health effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** May be harmful if swallowed.



# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## **alpha-Aluminium oxide powder**

Revision Date: 4/17/2024

Date Issued: 4/18/2024

Version: 2

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes serious eye irritation.

### **Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### **Additional Information**

RTECS: Not available

## **12 ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

No data available.

### **12.2 Persistence and degradability**

No data available.

### **12.3 Bioaccumulative potential**

No data available.

### **12.4 Mobility in soil**

No data available.

### **12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### **12.6 Other adverse effects**

No data available.

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## alpha-Aluminium oxide powder

Revision Date: 4/17/2024

Date Issued: 4/18/2024

Version: 2

### 13 DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

Contact specialist disposal companies. Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.

### 14 TRANSPORT INFORMATION

#### 14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

#### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

#### 14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

#### 14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

#### 14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

#### 14.6 Special precautions for user

No data available.

### 15 REGULATORY INFORMATION

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## **alpha-Aluminium oxide powder**

Revision Date: 4/17/2024

Date Issued: 4/18/2024

Version: 2

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### **15.2 Chemical safety assessment**

no data available

### **Country specific information**

**Germany**

WGK: 3

(Self-Classification)

## **16 OTHER INFORMATION**

### DISCLAIMER

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPOSED TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. IOLITEC SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. THIS INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE.

IN NO WAY SHALL IOLITEC BE LIABLE FOR ANY CLAIMS, LOSSES OR DAMAGES OF ANY THIRD PARTY OR FOR THE LOST PROFITS OR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, HOWSOEVER ARISING, EVEN IF THE COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.