

# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY

**SUBSTANCE NAME:** Aluminium Oxide Powder  
**MODEL NO.** -  
**PART NO:** 3052070, 3052075, 3052080, 3052100, 3052105, 3052110  
**COMPANY IDENTIFICATION:** CLARKE INTERNATIONAL,  
HEMNALL STREET, EPPING, ESSEX. CM16 4LG  
**BUSINESS TELEPHONE:** 01992 565300  
**BUSINESS FAX:** 01992 561562  
**EMERGENCY TELEPHONE:** 020 89887400

### PRODUCT IDENTIFIER /S

Brown Fused Alumina (NK and NK micro)

### USES OF THE PRODUCT

Mineral blasting abrasive for industrial use

## 2. HAZARDS IDENTIFICATION:

### 2.1 Classification

Not applicable

### 2.2 Label elements

Does not require labelling under the CLP Regulation (EC) No. 1272/2008 but please take note of this product information.  
No risk of silicosis during application.

### Safety instructions

Possible dust exposure due to fine dust particles.

### 2.3 Other hazards

Not known

## 3. COMPOSITION/INFORMATION ON INGREDIENTS:

Ingredients	NK (Mean values)	NK micro (Mean values)	EK (Mean values)	EK micro (Mean values)	EKR (Mean values)
Alumina (Al <sub>2</sub> O <sub>3</sub> )	95.65%	95.77%	99.73%	99.69%	99.30%
Titanium dioxide (TiO <sub>2</sub> )	2.42%	2.79%	-/-	-/-	-/-

Chemical characterisation	EINECS	CAS No.	(1) REACH Registraion No. (2) CLP Notificaiton No.	Classification according to CLP Regulation (EC) No. 1272/2008	
				Hazard classes / hazard categories	Hazard statements
Alumina (Al <sub>2</sub> O <sub>3</sub> )	215-691-6	1344-28-1	(1) 01-2119529248-35-0010 (2) 02-2119709295-38-0000	-/-	-/-
Titanium dioxide (TiO <sub>2</sub> )	236-675-5	13463-67-7	(2) 02-2119879066-28-0000	-/-	-/-

Substances listed on the so-called 'Candidate List of Substances of Very High Concern (SVHC) for authorisation' of the European Chemicals Agency (ECHA) are not intentional ingredients of this product. It is therefore not to be expected that those substances are present in quantities of >0.1% in the product.

### Hazardous substances

No dangerous ingredients

### Substances with prescribed EC exposure limits

Does not contain substances with EC exposure limits

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## 4. FIRST AID MEASURES:

Please also take note of sections 8 and 16 of this product information.

### 4.1. Description of first aid measures

#### General information

Consult a doctor in case of health disorders.

#### After inhalation

Provide the affected person with fresh air. Consult a doctor in case of irritation of the respiratory tract.

#### After eye contact

Remove contact lenses and rinse the eyes with open eyelids for 10 minutes under running water.

If necessary, consult an ophthalmologist.

#### After skin contact

Wash with water and rinse.

#### After swallowing

Rinse mouth and drink plenty of water. Do not induce vomiting. If you feel unwell, seek medical advice.

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

Not known

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

Treat symptomatically

## 5. FIRE FIGHTING MEASURES:

### 5.1. Extinguishing media

#### Suitable extinguishing media

Product does not burn. Match extinguishing measures to ambient situation.

#### Unsuitable extinguishing media

Not known

### 5.2. Special hazards arising from the product

Not known

### 5.3. Advice for fire fighters

Match the firefighting measures to the environmental conditions.

#### Additional information

Not known

## 6. ACCIDENTAL RELEASE MEASURES:

### 6.1. Personal precautions

Avoid dust formation.

### 6.2. Environmental protection measures

Not known.

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

Pick up mechanically and dispose of properly.

### 6.4. Reference to other sections

Refer to protective measures in sections 7 and 8.

#### Additional information

Not known.

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## 7. HANDLING & STORAGE:

### 7.1. Precautions for safe handling

#### Information on safe handling

Avoid dust formation.

#### Information on fire and explosion protection

No special fire protection measures are necessary.

#### Additional information

Not known.

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

#### Information on storage conditions

Always store product in dry conditions

#### Requirements for storage rooms and containers

No special requirements needed.

#### Storage class VCI

LGK 13 (non-combustible solids)

### 7.3 Specific end uses

Alumina is used to manufacture or to use as blasting or abrasive medium.

## 8. Limitation and monitoring of exposure / personal protective equipment

### 8.1. Control parameters

#### Occupational exposure limit values in the workplace and / or biological limit values

#### Occupational Exposure Limits (OEL) in Germany for dusts

Inhalable fraction (E)	10 mg/m <sup>3</sup>
Respirable fraction (A)	1.25 mg/m <sup>3</sup>

with exceeding factor 2 each, ref. TRGS 900

#### Community exposure limits

Country specific. Please inquire in individual cases.

### 8.2. Limitation and monitoring of exposure

#### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over the use of personal protective equipment. Provide adequate ventilation. This can be achieved by local suction or general air extraction.

Alumina is not a hazardous substance, thus only the general dust limit value applies.

Suitable assessment methods to verify the effectiveness of the protective measures taken include metrological and non-metrological determination methods as described in the Technical Rules for Hazardous Substances (TRGS) 4021 and BS EN 14042 "Workplace areas, Guidelines for the implementation and application of processes for assessment of exposure to chemical and biological agents".

#### Personal protective equipment

The use of personal protective equipment is dependent on the concentrations and quantity of hazardous substances in their execution in specific workplaces.

#### Respiratory protection

Normally, no personal respiratory protection is necessary. In case of insufficient ventilation or exceeded workplace limits, a protective breathing mask should be worn (FFP filtering half mask depending on the existing concentration).

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## Hand Protection

Glove material: leather

## Eye Protection

Tight-sealing protective eyewear (dust-protection goggles) in accordance with EN 166:2001.

## Body protection

With normal use, no body protection by half or full-body coverall and boots is required.

## Information on industrial hygiene

Minimum standards for protective measures when handling working materials are listed in TRGS 500.

Do not eat, drink, smoke or take drugs while using this product.

Avoid contact with skin, eyes and clothing.

Remove soiled or soaked clothing immediately.

Wash hands before breaks and at end of work.

Protect skin by using skin creams.

## Environmental protection measures

See section 6 and 7. No further action is required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

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

#### Appearance

Appearance	angular
Physical State	solid
Colour	brown
Odour	odourless

#### Safety data

Explosion hazard	The product itself is not explosive; however formation of explosive air/dust mixtures is possible.
Lower explosion limit	not known
Upper explosion limit	not known
Vapour pressure	not relevant
Specific gravity	approx. 3.9 to 4.1 g/cm <sup>3</sup>
Flow time	not relevant
Water solubility	insoluble in water
pH value	not applicable
Boiling point/range	not applicable
Flash point	not determined as product is not flammable
Melting point	approx. 2,000°C
Ignition temperature	not determined as product is not flammable

The information about the explosion limits refer to Alumina. Please refer to the technical data sheet for other physical and chemical data.

### 9.2. Other information

None

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

Alumina is non-reactive and does not change with proper handling and storage.

### 10.2. Chemical stability

Alumina is chemically stable and does not change with proper handling and storage.

### 10.3. Possibility of hazardous reactions

No hazardous reactions known.

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## 10.4. Conditions to avoid

No decomposition if used according to specifications.

## 10.5. Incompatible materials

No hazardous reactions known.

## 10.6. Hazardous decomposition products

No known hazardous decomposition products.

## 11. TOXICOLOGICAL INFORMATION:

### 11.1 Information on toxicological effects

According to current IFA reports the product contains no silicosis-inducing, toxic and carcinogenic components. The indications given in section 8 of this product information must be observed.

#### Acute toxicity

No data on the product available

#### Irritation

No data on the product available

#### Corrosivity

No data on the product available

#### Sensitisation

No data on the product available

#### Repeated dose toxicity

No known toxicity of Alumina.

#### CMR effects (carcinogenic, mutagenic and toxic to reproduction)

No carcinogenic effect according to IFA reports.

#### Summarised evaluation of the CMR properties

No known CMR properties.

#### Practical experience (relevant for classification and other observations)

No data on the product available

#### Carcinogenicity

No known carcinogenicity of Alumina

#### Mutagenicity

No data on the product available

#### Reproductive toxicity

No data on the product available

#### Other information

Not known

## 12. ENVIRONMENTAL INFORMATION:

### 12.1. Toxicity

No known effects

#### Ecotoxicity

For Alumina no environmental problems are to be expected when handled and used properly

#### Fish toxicity

Harmful effects for aquatic organisms are not expected.

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## **Aquatic invertebrates**

Harmful effects for aquatic organisms are not expected

## **Water plants**

Harmful effects for aquatic organisms are not expected

### **12.2. Persistence and degradability**

Based on current experience, this product is inert and not degradable.

### **12.3. Bio-accumulation potential**

No data available. Accumulation in biological materials is rather unlikely, as it is inert and insoluble.

### **12.4. Mobility in soil**

Potential not known.

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

Not relevant. The substances in this product do not meet the criteria for classification as PBT or vPvB.

### **12.6. Other harmful effects**

Not known

## **13. DISPOSAL CONSIDERATIONS:**

### **13.1 Waste treatment methods**

#### **13.1 Product**

Alumina. If recycling is not possible, waste must be disposed of in compliance with national and local regulations. Confirm the exact waste code with the disposer.

#### **Waste Code according to European Waste Catalogue (EWC)**

12 01 17 waste blasting material other than those mentioned in 12 01 16

### **13.2. Packaging**

National and local regulations must be followed.

#### **Contaminated packaging**

Packaging with Alumina residues can be recycled.

#### **Cleaned packaging**

Packaging can be reused after being cleaned or recycled.

## **14. TRANSPORT INFORMATION:**

Alumina is no dangerous good.

## **15. REGULATORY INFORMATION:**

### **15.1 Safety, health and environmental regulations / legislation specific for the product**

#### **EU regulations**

Not known

#### **National regulations**

#### **Water hazard class**

Not hazardous to water; classification according to VwVwS, Annex 4.

#### **Technical instruction on air quality (TA-Luft)**

Substances not mentioned by name.

#### **Hazardous Incident Ordinance (12. BImSchV [German Federal Immission Control Regulation])**

Substances not mentioned by name.

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**Solvents Ordinance (31. BImSchV [German Federal Immission Control Regulation])**

Substances not mentioned by name.

**Chemicals Prohibition Ordinance**

Substances not mentioned by name.

**Relevant Technical Rules for Hazardous Substances**

Contains no hazardous substances.

**Employment Restrictions**

Not known

**Miscellaneous**

Alumina is not subject to the VOC Regulation.

**International regulations**

All Alumina ingredients are listed with TSCA, AICS, DSL (NDSL), NEPA and PICCS and registered with MITI / ENCS under 1-23.

## 15.2 Chemical safety assessment

Not relevant.

## 16. OTHER INFORMATION:

**Further applicable EC directives**

Not known

**Restrictions on use recommended by the manufacturer**

For industrial application only.

**Other information**

The product information in this documentation is correct to the best of our knowledge at the time of printing. The information is intended to provide you with advice on the safe handling of the product mentioned in this product information for storage, processing, transport and disposal. The information cannot be applied to other products. If the product mentioned in this documentation is in any way tampered with i.e. mixed with other materials, processed or undergoes processing, the information as supplied in this document no longer applies to the new product unless expressly stated otherwise.

**Changes since the last version**

**Literature and data sources**

**Regulations**

REACH Regulation (EC) No. 1907/2006

CLP Regulation (EC) No. 1272/2008

Hazardous Substances Ordinance (GefStoffV)

Commission Decision 2000/532/EC (AW)

Transport Regulations according to ADR, RID and IATA

TRGS 900

VOC Regulation (ChemVOCFarbV)

**Hazard Statements referred to in section 2 and 3 according to Regulation (EC) No. 1272/2008:**

None

**The above information is based on the present state of knowledge; however, this shall not constitute a guarantee of product properties and establishes no contractual legal rights. Existing laws and regulations must be strictly followed by the recipient or user of the blasting medium on their own responsibility.**

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## Legend

ADR	European agreement concerning the international carriage of dangerous goods by road
AW/EWC	European Waste Catalogue
BImSchV	Regulation on the Implementation of the (German) Federal Immission Control Ordinance
CAS	Chemical Abstracts Service
EC	European Community
EN	European Standard
IATA-DGR	International Air Transport Association-Dangerous Goods Regulations
PBT	Persistent, bioaccumulative, toxic
RID	Regulations concerning the International Carriage of Dangerous Goods
TRGS	Technical Rules for Hazardous Substances
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds (VOC's)
vPvB	Very persistent and very bioaccumulative
VwVwS	Administrative Regulation on Substances Hazardous to Water

**Last updated:** 19.01.16