

SECTION 1: Identification of the substance/mixture and of the company/undertaking.

1.1. Product identifier

Product form : Substance

Product name : Calcined Alumina

EC no : Aluminium Oxide - 215-691-6

CAS No. : Aluminium Oxide - 1344-28 -1

REACH registration No. : Aluminium Oxide - 01-2119529248-35-0036

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

1.2.1. Relevant identified uses

Use of the substance/preparation:

Substance used as such, in formulation or in formulation of products such as:

- Refractories
- Glass
- Ceramics
- Steel industries

1.2.2. Uses advised against

- None

Full text of use descriptors: see section 16.

1.3. Details of the supplier of the safety data sheet

Simba Materials Limited t/a CTM Potters Supplies

Unit 7-8

Broomhouse Lane Industrial Estate

Broomhouse Lane

Edlington

Doncaster

DN12 1EQ

T +44 (0)1709 770801 - F +44 (0)1709 770803

doncaster@ctmpotterssupplies.co.uk – www.ctmpotterssupplies.co.uk admin@ctmpotterssupplies.co.uk

1.4. Emergency telephone number

T +44 (0)1709 770801 (Office hours only)

doncaster@ctmpotterssupplies.co.uk

SECTION 2: Hazards identification.

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Physical and chemical hazards: Not classified

Human health: Not classified

Environment: Not classified

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

Does not pose any health hazard under normal conditions of use and as delivered. Prolonged high dust concentration may cause mechanical irritation of respiratory tract.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP)

None

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH, annex XIII.

SECTION 3: Composition/information on ingredients.

3.1. Substances

Chemical name	CAS No.	EC-No.	%	Classification (67/548/EEC)	Classification (1272/2008/EC)
Aluminium Oxide	1344-28 -1	215-691-6	>99.5	N/A	N/A

Full text of R-, H- and EUH-phrases: see section 16

REACH Registration numbers: Aluminium Oxide - 01-2119529248-35-0036

SECTION 4: First aid measures.

4.1. Description of first aid measures

Inhalation: Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion: Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Skin contact: Wash skin with soap and water. Get medical attention if irritation persists after washing.

Eye contact: Make sure to remove any contact lenses from the eyes before rinsing. Rinse eye with water immediately. Get medical attention if any discomfort continues.

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

Inhalation: May cause coughing

Ingestion: May cause indigestion

Skin contact: No specific symptoms noted.

Eye contact: May cause acute redness of the eyes

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

Treat symptomatically.

SECTION 5: Firefighting measures.

5.1. Extinguishing media

Suitable extinguishing media: Powder. CO2. Sand.

Unsuitable extinguishing media: None

5.2. Special hazards arising from the substance or mixture

Fire hazard: Not flammable.

Explosion hazard: No explosive properties known.

Reactivity: Stable under normal conditions of handling and storage.

5.3. Advice for firefighters

Protection during firefighting: No specific fire fighting procedures given.

SECTION 6: Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Keep public away from danger area. See section 8.2.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and soil. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Sweep or shovel spills into appropriate container for disposal. Avoid dust production.

6.4. Reference to other sections

See section 8 and 13 for more information.

SECTION 7: Handling and storage.

7.1. Precautions for safe handling

Precautions for safe handling: Do not breathe dust. Wash hands plentifully and other exposed areas with water after handling. Remove contaminated clothing and shoes. Wash clothing before re-using.

Packagings: Even those that have been emptied, will retain product residue. Always obey safety warnings and handle empty packages as if they were full. Avoid all contact with this substance.

Hygiene measures: When using do not eat, drink or smoke. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Remove contaminated clothing and shoes.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in dry, cool, well-ventilated area. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

The identified uses for this product are detailed in section 1.2

SECTION 8: Exposure controls/personal protection.**8.1. Control parameters**

Generally same as for nuisance dust. Observe the local by-laws in terms of fine dust:

(e.g.: OSHA-PEL value 15 mg/m³ total dust, 5 mg/m³ for respirable dust; ACGIH-TWA value 10 mg/ m³, TRGS 900 10 mg/m³ respirable, 3 mg/m³ alveolar)

Exposure Limits:

Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust).

8.2. Exposure controls

Appropriate engineering controls: Use as far as possible in a closed system. Provide a regular control of the atmosphere. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Local exhaust and general ventilation must be adequate to meet exposure standards. Please refer to the annex (exposure scenarios).

Hand protection: Use gloves resistant to chemical products corresponding to EN 374:3. Take advice to gloves' manufacturer.

Eye protection: Wear safety glasses with side shields according EN 166.

Skin and body protection: Wear closed protective clothing.

Respiratory protection: Use respiratory protection mask according to EN 140 or EN 405 with filter type P3 according to EN 143:2000 or FFP3 according to EN 149:2001.

Environmental exposure controls: Avoid release to the environment.

SECTION 9: Physical and chemical; properties.

Physical state	Solid Powder.
Colour	White.
Odour	odourless.
Odour threshold	Not applicable
pH	9 (@10% aqueous dispersion)
Relative evaporation rate (butylacetate=1)	No data available
Melting point	2,050 °C
Freezing point	No data available
Boiling point	2,980 °C
Flash point	Not flammable
Self ignition temperature	Not applicable
Decomposition temperature	No data available
Flammability (solid, gas)	Not flammable
Vapour pressure	Not applicable.
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	3,4 - 3,9 g/cm ³ (20 °C)
Solubility in water	0.00002 g/l at 20 °C
Log Pow	Not applicable
Log Kow	Not applicable
Viscosity, kinematic	Not applicable
Viscosity, dynamic	Not applicable
Explosive properties	Not explosive.
Oxidising properties	Non oxidizing material according to EC criteria.
Explosive limits	Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity.**10.1. Reactivity**

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal conditions of handling and storage.

10.3. Possibility of hazardous reactions

Not relevant.

10.4. Conditions to avoid

Not relevant

10.5. Incompatible materials

No specific, or groups of materials, are likely to react to produce a hazardous situation.

10.6. Hazardous decomposition products

Not relevant

SECTION 11: Toxicological information.**11.1. Information on toxicological effects****Other health effects:** No bioaccumulation potential

Acute effects	Value	Species	Type	Test substance
Oral	>2000 mg/kg bw	Rat	Acute	Aluminium Oxide
Dermal	Not applicable			
Inhalation	LC50: 7.6mg/l	Rat	Acute	Aluminium Oxide
Skin corrosiion	Not corrosive	Rabbit	Acute	Aluminium Oxide
Skin irritation	Not irritating	Rabbit	Acute	Aluminium Oxide
Eye irritation	Not irritating	Rabbit	Acute	Aluminium Oxide
Sensitisation	Non sensitising	Rabbit	Acute	Aluminium Oxide
Repeated dose toxicity	Value	Species	Type	Test substance
Oral	NOAEL 30mg/kg bw/day	Rat	Chronic	Analogue
Inhalation	NOAEL 70mg/kg bw/day	Rat	Subchronic	Analogue
Carcinogenicity	There is no evidence of any carcinogenic effects			
Mutagenity	There is no evidence of any mutagenic effects			
Reproductive toxicity	There is no evidence of any reproductive toxicity effects			

SECTION 12: Ecological information.**12.1. Fish toxicity**

	Value	Species	Type	Test substance
Fish toxicity	LC50: >100mg/l	Salmo trutta	Acute	Aluminium Oxide
Invertebrate toxicity	EC50: >100mg/l	Daphnia Magna	Acute	Aluminium Oxide
Algae toxicity	EC50: >100mg/l	Selenastrum capricornutum	Acute	Aluminium Oxide
Micro-organism toxicity	Study scientifically unjustified			

12.2. Persistence and degradability

Not applicable for inorganic substances.

12.3. Bioaccumulative potential

Not applicable.

12.4. Mobility in soil

Not applicable.

12.5. Results of PBT and vPvB assessment

This substance/mixture does not meet the PBT or vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects

None known.

SECTION 13: Disposal considerations.**13.1. Waste treatment methods**

Waste treatment methods: Dispose of this material and residues in accordance with local authority requirements.

Additional information: Empty packaging can have residues or dusts and are subject to proper waste disposal, as above.

Ecology - waste materials: See the European waste catalogue.

SECTION 14: Transport information.

14.1. UN number

The product is not covered by international regulation on transport of dangerous goods (IMDG, IATA, ADR/RID).

14.2. UN proper shipping name

Not classified for transportation.

14.3. Transport hazard class(es)

Not classified for transportation.

14.4. Packing group

Not classified for transportation.

14.5. Environmental hazards

Other information: No environmental hazards known with this product.

14.6. Special precautions for user

Not classified for transportation.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory information.

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

EU-Regulations and directives

Regulation (EC) No 2037/2000 (Ozone Depleting Substances) Not applicable

Regulation (EC) No 850/2004 (Persistent Organic Pollutants) Not applicable

Regulation (EC) No 689/2008 (Export and import of dangerous substances) Not applicable

Directive 2002/95/EC (RoHS) Not applicable

Directive 2002/96/EC (WEEE) Not applicable

Directive 1999/13/EC (VOC) Not applicable

Restrictions according TITLE VIII of the Regulation (EC) No 1907/2006 (REACH) None

National legislations

Water pollution class Not classified

Classification according VbF Not classified

Chemical name	TSCA	DSL	ENCS	IECSC	KECL	PICCS	AICS
Aluminium Oxide	listed	listed	1 - 23	listed	KE-01012	listed	listed

SECTION 16: Other information.

As a result of the hazard assessment and PBT/vPvB assessment it is found that the substance Aluminium oxide (CAS# 1344-28-1) does not meet the criteria for classification as hazardous (according to Directives 67/548/EEC and 1272/2008/EC) nor is it considered to be a PBT/vPvB. An exposure assessment and the subsequent step of risk characterisation is not required.

Abbreviations and acronyms:

ACGIH - American Conference of Governmental Industrial Hygienist

OSHA - Occupational Safety & Health Administration

PEL - Permissible exposure limit

TWA - Time Weighted Average

TRGS - Technische Regeln für Gefahrstoffe

NOEL - No Observed Effect Level

NOAEL - No Observed Adverse Effect Level

LC - Lethal Concentration

EC - Effective Concentration

ADR - Accord européen sur le transport des marchandises dangereuses par route

IATA-DGR - International Air Transport Association-Dangerous Goods Regulations

ICAO-TI - International Civil Aviation Organization-Technical Instructions

IMDG - International Maritime Code for Dangerous Goods

MARPOL - Maritime Pollution Convention

RID - Règlement international concernant le transport des marchandises dangereuses par chemins de fer

RoHS - Restriction of (the use of certain) hazardous substances

WEEE - Waste Electrical and Electronic Equipment

VOC - Volatile Organic Compounds

VbF - Verordnung über brennbare Flüssigkeiten

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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