

Safety Data Sheet

according to regulation (EC) No 1907/2006



Calcined Alumina

RM1001

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

1.1. Product Identifier

Scarva Raw Materials RM1001 Calcined Alumina
Product form : Substance
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

Use of the substance/mixture

Use of the substance/preparation:
Substance used as such, in formulation or in formulation of products such as:

- Refractories
- Glass
- Ceramics
- Steel industries

1.3. Details of the supplier of the safety data sheet

Scarva Pottery Supplies
Unit 20
Scarva Road Industrial Estate
Scarva Road
Banbridge
Co Down
BT32 3QD
t: +44 (0)28 4066 9699
e: david@scarvapottery.com
w: www.scarva.com

1.3. Emergency telephone number

+44 (0)28 4066 9699

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

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

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This product is classified and labelled according to the CLP regulation.

Hazard statements

Not applicable

Precautionary statements

P260 Do not breathe dust/gas/vapour/spray.

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

Mineral compounds.

Ec No.	Chemical Name	CAS No.	Index No.	Percentage Composition
215-691-6	Aluminium Oxide	1344-28 -1		>99.5

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

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation	Move the exposed person to fresh air immediately. Seek medical attention if discomfort continues.
After ingestion	Rinse mouth with water. In the event of symptoms refer for medical treatment. Do not induce vomiting.
After 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.
After skin contact	Wash affected areas with soap and water. Seek medical attention should irritation persist.

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

After inhalation	May cause coughing
After ingestion	May cause indigestion
After eye contact	May cause acute redness of the eyes
After skin contact	No specific symptoms noted

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.

Extinguishing media that must not be used for safety reasons

None

5.2. Special hazards arising from the substance or mixture

In case of strong heating partial formation of: carbon monoxide and carbon dioxide.

5.3. Advice for firefighters

Protective equipment

No specific firefighting procedures given.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

Keep public away from danger area. See section 8.2.

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.

6.3. Reference to other sections

See section 8 and 13 for more information.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Advice on 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.

Packaging

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

Requirements for storage rooms and vessels

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).

Protection of hands

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

Protection of eyes

Wear safety glasses with side shields according EN 166.

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.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General information

Form:	Solid powder
Colour:	White
Odour:	Odourless
Water solubility:	Insoluble
pH:	9 (@10% aqueous dispersion)

Changes in the physical state

Flash point °C:	Not applicable
Melting point:	2,050 °C
Boiling point:	2,980 °C
Evaporation rate:	No data available
Flammability:	Non flammable
Burn rate:	Not applicable
Density	3,4 - 3,9 g/cm ³ (20 °C)
Solubility in water	0.00002 g/l at 20 °C
Explosive properties	Not explosive.
Oxidising properties	Non oxidizing material according to EC criteria.

SECTION 10: Physical and chemical properties

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 Properties

11.1. Information on toxicological effects

Acute toxicity

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 corrosion	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

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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

Acute effects	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: Waste disposal

13.1. Waste treatment methods

Dispose of this material and residues in accordance with local authority requirements. Empty packaging can have residues or dusts and are subject to proper waste disposal, as above.

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

ADR/RID, IMDG, IATA: Not classified for transportation.

14.3. Transport hazard class(es)

Not classified for transportation.

14.4. Packaging 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.

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SECTION 15: Regulatory information

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

EU Regulations

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 Regulations

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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