

ALUMINA HYDRATE

Safety Data Sheet

according to regulation (EC) No 1907/2006



Alumina Hydrate

RM1002

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Version 3
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Product name: Scarva Raw Materials RM1002 Alumina Hydrate
Product form: Substance
EC no: 244-492-7
CAS No.: 21645-51-2
REACH registration No: 01-2119529246-39-0008

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

Use of the substance/mixture

General function:

Flame retardant additive.

Industrial use:

Production substance
Polymer processing
Production of plastics and rubber compounds
Formulation flame retardant preparation
Manufacture and formulation of pharmaceutical preparations
Compounds used in transport industry
Compounds used in electrical application
Compounds used in electronic application
Compounds used in building and construction
Compounds used in Wire & Cable
Abrasive for glass industry, ceramics and stones
Textile coating
Production of corrosion inhibitors
Fuel
Deacidification agent for paper
pH regulator
Use in coatings, inks, paints and roofing
Use as corrosion inhibitor of gas turbines and boilers
Use in cleaning agents
Use in oil field operations
Use in lubricants
Use in metal working fluids
Use in blowing agents
Use in binders and release agents
Use in textile
Use in functional fluids
Use in agrochemicals
Use in water treatment chemicals
Use in mining chemicals
Recycling plastics
White pigment for paper and board, filler, etc.

Professional use:

Polymer processing
Use in Adhesives and/or sealants
Use in coatings, inks, paints and roofing
Use in agrochemicals
Use in cleaning agents
Use in oil field operations
Use in lubricants
Use in metal working fluids
Use in binders and release agents
Use in propellants
Use in textile

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Use in explosives
Use in water treatment chemicals
Use in functional fluids
For use by laboratories for research
Fuel
De-icing & anti-icing applications
Road and construction applications

Consumer Use:

Use in coatings, inks, paints and roofing
Use in cleaning agents
Use in lubricants
Use in propellants
Fuel
Use in functional fluids
De-icing & anti-icing applications
Cosmetic additive
Use in water treatment chemicals

Uses advised against:

None known

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

Not regulated under the criteria of EC Regulation N° 1272/2008 (CLP).

2.2. Label Elements

Labelling according to Regulation (EC) No 1272/2008

Not regulated under the criteria of EC Regulation N° 1272/2008 (CLP).

Precautionary statements:

Handle in accordance with good industrial hygiene and safety practice.

2.3. Other Hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

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SECTION 3: Composition/information on ingredients

3.1. Substances

Aluminium Hydroxide
Al(OH)₃

Ec No.	Chemical Name	CAS No.	Weight %	Classification (67/548/EEC)	Classification (1272/2008/EC)	REACH Registration Number
244-492-7	Aluminium hydroxide	21645-51-2	>99	-	-	01-2119529246-39-xxxx

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation Remove to fresh air and keep at rest in a position comfortable for breathing.
After ingestion Rinse mouth with water. Give plenty of water to drink.
After eye contact In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
After skin contact After contact with skin, wash immediately with plenty of water.

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

Not expected to be acutely toxic.

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

No specific recommendations.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Not combustible. Use media appropriate for surrounding fire.

Extinguishing media that must not be used for safety reasons

None known.

5.2. Special hazards arising from the substance or mixture

Non-combustible. No hazardous thermal decomposition.

5.3. Advice for firefighters

Protective equipment

Wear self-contained breathing apparatus and protective suit.

Additional information

Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal.

6.4. Reference to other sections

For personal protection, see Section 8. For waste disposal, see Section 13.

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SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid dust formation. Handle in accordance with good industrial hygiene and safety practice.

Advice on protection against fire and explosion

Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed and dry.

7.3. Specific end use(s)

No information available

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

DNEL/DMEL & PNEC Values

Derived No Effect Level (DNEL)

DNEL/DMEL Exposure Route	Units	Exposure Frequency	Industrial Worker	Professional Worker	General Population
Oral	mg/kg	Short-term	NA*	NA*	NA*
Oral	mg/kg bw/d	Long-term, repeated	NA*	NA*	6.85
Dermal	mg/kg bw/d	Short-term	NA*	NA*	NA*
Dermal	mg/kg bw/d	Long-term, repeated	NA*	NA*	NA
Inhalation	mg/m ³	Short-term	NA	NA	NA
Inhalation	mg/m ³	Long-term, repeated	3	3	NA

NA*: Not applicable as not classified, based on study. NA: Not applicable

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation. Avoid dust formation. Training in proper use of PPE provided and ensured via an inspection policy.

Protection of hands

Protective gloves complying with EN 374

Protection of eyes

Safety glasses with side-shields

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. If dust occurs: dust mask with P1 particle filter (respirator with filter FFP2-FFP3).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General information

Form:	Powder
Colour:	White/Off White
Odour:	Almost odourless
Water solubility:	Insoluble
Density:	2.42 g/cm ³ (20 °C)
Boiling point:	>2900°C (1013 hPa)
pH	+/-9(10% in H ₂ O)

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SECTION 10: Physical and chemical properties

10.1. Reactivity

No data available

10.2. Chemical stability

Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Not applicable.

10.4. Conditions to avoid

No particular incompatibility.

10.5. Incompatible materials

No information available

10.6. Hazardous decomposition products

None under normal processing

SECTION 11: Toxicological Properties

11.1. Information on toxicological effects

General information

Rat Oral LD50:>2000 mg/kg
LC50/inhalation/4h/rat :>2.3 mg/L (Al₂O₃)

Skin irritation and corrosivity

Prolonged contact may cause dryness of the skin.

Inhalation

No skin irritation (rabbit). No eye irritation (rabbit).

Serious eye damage/eye irritation

Irritating and may cause redness and pain.

Germ cell mutagenicity

In vitro mutagenicity test : Not genotoxic in mammalian cell systems. In vivo mutagenicity tests: Mutagenicity (micronucleus test) (rat): negative (weight of evidence approach).

Carcinogenicity

Information given is based on data obtained from similar substances. Did not show carcinogenic effects in animal experiments. (weight of evidence approach).

Reproductive toxicity

Information given is based on data obtained from similar substances. No indication of effects on fertility. No indication of effects on developmental toxicity.

Additional toxicological information

Based on available data, the classification criteria are not met.

SECTION 12: Ecological Information

12.1. Toxicity to fish, algae, daphnia and other aquatic invertebrates

Aquatic toxicity is unlikely due to low solubility.

12.2. Persistence and degradability

Inorganic substance.

12.3. Bioaccumulative potential

Not expected to bioaccumulate

12.4 Mobility in soil

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No information available

12.5. Results of PBT and vPvB assessment

The substance is not considered as PBT or vPvB as the criteria for categorization as "P", "B" or "T" are not fulfilled.

SECTION 13: Waste disposal

13.1. Waste treatment methods

Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

14.1. UN number

Not applicable.

14.2. UN proper shipping name

ADR/RID, IMDG, IATA: Not restricted.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Marine pollutant No.

14.6. Special precautions for user

Not a hazardous material with respect to these transport regulations.

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

National Regulations

EH40/2005 Workplace exposure limits.

REACH Registration

01-2119529246-39-0008

15.2. EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulations (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.3. Chemical safety assessment

A Chemical Safety Assessment has been carried out on the substance. No exposure scenarios have been developed as the substance is not classified.

SECTION 16: Other Information

Abbreviations and acronyms:

ADN: European Agreement concerning international carriage of Dangerous goods by Inland waterways
ADR: European Agreement concerning international carriage of Dangerous goods by Road
AF: Assessment factor
BCF: Bioconcentration factor
Bw: Body weight

ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
LC50: Median lethal concentration
LD50: Median lethal dose
NOAEL: No-observed-adverse-effect-level
NOEC: No observed effect concentration
NOEL: No observed effect level

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CAS: Chemical Abstracts Service
CLP: Classification, labelling, packaging
CSR: Chemical Safety Report
DMEL: Derived maximum effect level
DNEL: Derivative No effect Level
EC: European Community
ELV: Emission limit values
EN: European Norm
EUH: European Hazard Statement
EWC: European Waste catalogue
IATA: International Air Transport Association

OEL: Operator exposure level
PBT: Persistent, bioaccumulative, Toxic
PEC: Predicted effect level
PNEC: Predicted No effect Concentration
REACH: Registration, evaluation and autorisation of chemicals
RID: Regulations concerning the international carriage of dangerous goods by rail
STEL: Short Term Exposure Limit
TWA: Time weighted average
vPvB: Very persistent, very bioaccumulative.

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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