



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Revision date 26-Sep-2023

Revision Number 6

Product identifier

Product Name CALCIUM ALUMINATE CEMENT

Other means of identification

Product Code(s) 993

Synonyms CA-14 M, CA-14 S, CA-14 W, CA-25 C, CA-25 M, CA-25 R, CA-270, CA-470 TI, CA-670, CA-680, CAC DISCHARGE, CARO WHITE, CA-SYNC

Recommended use of the chemical and restrictions on use

Recommended use Hydraulic binder. Used for production of refractory concretes and mortars and as ingredient of building chemistry products

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address

Almatis, Inc.
P.O. Box 300
4701 Alcoa Road
Bauxite, AR 72022
USA
Telephone: +1 501-776-4677

Manufacturer Address

Almatis B.V.
Theemsweg 30
NL-3197 KM Botlek Rt
The Netherlands
Phone: +31 181270129

Emergency telephone number

Emergency Telephone Argentina: +54 11 5219 8871

Classification

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Precautionary Statements - Prevention

Not applicable

Precautionary Statements - Response

Not applicable

Precautionary Statements - Storage

Keep in a dry place

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other information

No information available.

Substance

Not applicable.

Mixture

Common name Calcium Aluminate cement.

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Chemical name	CAS No	Weight-%	Trade secret
Calcium aluminate	65997-16-2	40-100	*
Aluminum oxide	1344-28-1	0-50	-

*The exact percentage (concentration) of composition has been withheld as a trade secret.

Description of first aid measures

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash skin with soap and water.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms Mild eye irritant. Mild skin irritant.

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical Avoid generation of dust. Not flammable.

Explosion data**Sensitivity to mechanical impact** None.**Sensitivity to static discharge** None.**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.**Personal precautions, protective equipment and emergency procedures****Personal precautions** Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust.**Methods and material for containment and cleaning up****Methods for containment** Prevent further leakage or spillage if safe to do so. Prevent dust cloud.**Methods for cleaning up** Sweep up and shovel into suitable containers for disposal. Pick up and transfer to properly labeled containers.**Reference to other sections** Personal protective equipment [PPE]. Disposal. Advices on safe handling.**Precautions for safe handling****Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid generation of dust. Ensure adequate ventilation.**Conditions for safe storage, including any incompatibilities****Storage Conditions** Keep container tightly closed in a dry and well-ventilated place.**Control parameters****Exposure Limits**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Aluminum oxide 1344-28-1	TWA: 1 mg/m ³ respirable particulate matter	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	-

Appropriate engineering controls**Engineering controls** Showers
Eyewash stations
Ventilation systems.**Individual protection measures, such as personal protective equipment**

Eye/face protection	No special protective equipment required.
Skin and body protection	Wear suitable protective clothing.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

Information on basic physical and chemical properties

Physical state	Solid
Appearance	White to off-white Powder
Color	White to off-white
Odor	None
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	10.5-11.0	aqueous solution None known
pH (as aqueous solution)		
Melting point / freezing point	1650 - 1820 °C / °F	
Initial boiling point and boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Relative vapor density	No data available	
Relative density	No data available	None known
Water solubility	No data available insoluble	
Solubility(ies)	slightly soluble	
Partition coefficient	No data available	None known
Autoignition temperature	- / °F	Does not ignite
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Liquid Density	2.8-3.3 g/cm ³
Bulk density	750-1100 kg/m ³

Reactivity	None under normal use conditions. None under normal processing.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Contact with water generates heat.
Hazardous polymerization	None under normal processing.

Conditions to avoid Avoid generation of dust. Avoid accumulation of airborne dust.

Incompatible materials Ammonium salts.

Hazardous decomposition products None under normal use conditions.

Information on likely routes of exposure

Inhalation May cause irritation.

Eye contact Dust contact with the eyes can lead to mechanical irritation. Mild eye irritation.

Skin contact Causes mild skin irritation.

Ingestion No known hazard by swallowing.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

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Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 5,005.00 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Aluminum oxide 1344-28-1	> 5000 mg/kg (Rat)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Other adverse effects	No information available.
Interactive effects	No information available.
Ecotoxicity	Not considered to be harmful to aquatic life.
Persistence and degradability	Not readily biodegradable.
Bioaccumulation	There is no data for this product.
Mobility	No information available.
Other adverse effects	No information available.
 <u>Disposal methods</u>	
Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.
 <u>DOT</u>	 Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO (air)</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
 <u>International Inventories</u>	
TSCA	Complies.
 DSL/NDSL EINECS/ELINCS ENCS	 Listed on DSL. Complies. Does not comply.

IECSC	Complies.
KECL	Complies.
PICCS	Does not comply.
AIIC	Complies.
NZIoC	Contact supplier for inventory compliance status.

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Aluminum oxide - 1344-28-1	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Aluminum oxide 1344-28-1	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

NFPA	Health hazards 0	Flammability 0	Instability 0	Special hazards -
HMIS	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGl(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Prepared By Product Safety Department
 Almatris B.V.
 Theemsweg 30
 3197 KM Botlek Rt
 The Netherlands
 +31-181-270124
 info@almatis.com.

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

US SDS version information - AGHS

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