

Safety data sheet

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP),
and US GHS






Printing date: 06.06.2018

Revision: 06.06.2018

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	Product Identifier	Calcium Aluminate
	GHS Product Identifier	Calcium Aluminate
	Chemical Name	Calcium Aluminum Oxide
	Trade Name	See Product Identifier
	CAS No.	12042-68-1
	EINECS No.	234-931-0
	REACH Registration No.	Not available
1.2	Relevant Identified Uses Of The Substance Or Mixture And Uses Advised Against	
	No further relevant information available.	
1.3	Details Of The Supplier Of The Safety Data Sheet	
	Company Identification	Washington Mills Electro Minerals Corp.
	Address	1801 Buffalo Avenue Niagara Falls, NY 14302
	Telephone	(716) 278-6600
	E-Mail (Competent Person)	info@washingtonmills.com
1.4	Emergency Telephone Number – ChemTel	
	(800)255-3924 (USA/Canada), 813-248-0585 (International)	

SECTION 2: HAZARDS IDENTIFICATION

2.1	Classification Of The Substance Or Mixture		
2.1.1	Classification according to Regulation (EC) No. 1272/2008		
	Hazard Pictogram(s)	Hazard Statement(s)	
		Eye Dam. 1	H318 Causes serious eye damage.
		Skin Irrit. 2	H315 Causes skin irritation.
2.1.2	Classification according to Directive 67/548/EEC or Directive 1999/45/EC		
	Hazard Symbol		Xn; Irritant
	R38-41: Irritating to skin. Risk of serious damage to eyes.		
	Information concerning particular hazards for human and environment: Not applicable.		
2.2	Label Elements		
2.2.1	Labelling according to Regulation (EC) No. 1272/2008		
	The substance is classified and labelled according to the CLP regulation.		
	Hazard Pictogram(s)	GHS05	Signal Word(s)
			DANGER
	Hazard-determining components of labelling: Calcium Aluminate (Calcium aluminum oxide)		
	Hazard Statement(s)	H315 Causes skin irritation. H318 Causes serious eye damage.	
	Precautionary Statement(s)	P280 Wear protective gloves / eye protection. P264 Wash thoroughly after handling. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313 If skin irritation occurs: Get medical advice/attention. P302+P352 IF ON SKIN: Wash with plenty of water.	
	Hazard description:		
	WHMIS-symbols:		D2B - Toxic material causing other toxic effects



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NFPA ratings (scale 0 - 4)		Health = 2 Fire = 0 Reactivity = 0
	HMIS-ratings (scale 0 - 4)	
HMIS Long Term Health Hazard	Substance is not listed.	
2.3 Other Hazards		
Results of PBT and vPvB assessment	PBT: Not applicable. vPvB: Not applicable.	

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

CAS No. Description:

12042-68-1 Calcium Aluminate (Calcium aluminum oxide)

Identification number(s)

EC number: 234-931-0

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

General Information: No special measures required.
After Inhalation: Supply fresh air; consult doctor in case of complaints.
After Skin Contact: Brush off loose particles from skin. Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.
After Eye Contact: Protect unharmed eye. Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After Swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.

4.2 Most Important Symptoms And Effects, Both Acute And Delayed

Gastric or intestinal disorders.
Coughing
Breathing difficulty
Strong irritant with the danger of severe eye injury.
Slight irritant effect on skin and mucous membranes.

Hazards

No further relevant information available.

4.3 Indication Of The Immediate Medical Attention And Special Treatment Needed

If swallowed, gastric irrigation.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Agents Use fire extinguishing methods suitable to surrounding conditions.
Unsuitable Extinguishing Agents None.

5.2 Special Hazards Arising From The Substance Or Mixture

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5.3 Advice for Fire-Fighters	Wear self-contained respiratory protective device. Wear fully protective suit.
Additional Information	Cool endangered receptacles with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment And Emergency Procedures	Avoid formation of dust. Ensure adequate ventilation. For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
6.2 Environmental Precautions	Do not allow to enter sewers/ surface or ground water.
6.3 Methods And Material For Containment And Cleaning Up	Pick up mechanically. Ensure adequate ventilation. Dispose contaminated material as waste according to item 13.
6.4 Reference To Other Sections	See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions For Safe Handling	Prevent formation of dust. Any unavoidable deposit of dust must be regularly removed. Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water. Use only in well ventilated areas.
Information About Fire – and explosion protection	No special measures required.
7.2 Conditions For Safe Storage, Including Any Incompatibilities: Requirements to be Met by Storerooms and Receptacles: Information About Storage in One Common Storage Facility: Further information about storage conditions:	Protect from humidity and water. Provide ventilation for receptacles. Store away from foodstuffs. Do not store together with acids. Store away from oxidising agents. Store in cool, dry conditions in well sealed receptacles. This product is hygroscopic.
7.3 Specific End Use(s)	No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control Parameters

Ingredients with limit values that require monitoring at the workplace: Not Required

DNELs No further relevant information available.

PNECs No further relevant information available.

Additional information: The lists valid during the making were used as basis.

8.2	Exposure Controls	
8.2.2	Personal Protective Equipment:	
	General protective and hygienic measures:	The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale dust / smoke / mist. Avoid contact with the eyes and skin.
	Respiratory Protection	Use suitable respiratory protective device when high concentrations are present. For spills, respiratory protection may be advisable.



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	Eye Protection	Safety glasses.
	Protection of Hands	Wear protective gloves.
	Body Protection	Protective work clothing.
	Limitation and supervision of exposure into the environment	No further relevant information available.
	Risk Management Measures	See Section 7 for additional information. No further relevant information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information On Basic Physical And Chemical Properties			
	Appearance	Powder	Color	White
	Odor	Characteristic	Odor Threshold (ppm)	Not available
	Melting Point (°C) / Freezing Point (°C)	Not available	Boiling Point/Boiling Range (°C)	Not available
	Flash Point (°C)	No Data	Explosive Limit Ranges	Not available
	Auto Ignition Temperature (°C)	Not available	Decomposition Temperature (°C)	Not available
	Explosive Properties	None	Oxidizing Properties	Not available
	Flammability (Solid, Gas)	Not available	Ph (Value)	Not available
	Evaporation Rate	N/A	Vapor Pressure (mm Hg)	Not available
	Vapor Density (Air=1)	N/A	Density at 20 °C:	2,98 g/cm ³
	Solubility (Water)	Insoluble	Solubility (Other)	Not available
	Partition Coefficient (N-Octanol/Water)	Not available	Viscosity (mPa.s)	Not available
9.2	Other Information	No further relevant information available.		

SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	
10.2	Chemical Stability	
	Thermal Decomposition / conditions to be avoided:	No decomposition if used according to specifications.
10.3	Possibility of Hazardous Reactions	Strong exothermic reaction with acids. Reacts with strong oxidising agents. As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion.
10.4	Conditions To Avoid	Moisture.
10.5	Incompatible Materials	No further relevant information available.
10.6	Hazardous Decomposition Product(s)	Toxic metal oxide smoke

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on Toxicological Effects	
	Acute toxicity:	
	Primary Irritant Effect:	
	On the skin:	Irritant to skin and mucous membranes.
	On the eye:	Strong irritant with the danger of severe eye injury.
	Sensitisation:	No sensitising effects known.
	Additional toxicological information:	The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Irritant

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SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	
Aquatic toxicity:	No further relevant information available.
12.2 Persistence and Degradability	Inorganic product, is not eliminable from water by means of biological cleaning processes.
12.3 Bioaccumulative Potential	Does not accumulate in organisms.
12.4 Mobility in Soil	No further relevant information available.
Additional ecological information:	
General notes:	Due to available data on eliminability/decomposition and bioaccumulation potential a prolonged damage of the environment is unlikely. Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow product to reach ground water, water course or sewage system.
12.5 Results of PBT and vPvB Assessment	PBT: Not applicable. vPvB: Not applicable.
12.6 Other Adverse Effects	No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods Recommendation	Contact waste processors for recycling information. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.
Uncleaned Packaging: Recommendation:	Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

Land Transport (ADR/RID) (c)(d)		Land Transport (Within USA) (b)(d)	
UN Number	None	UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.	Proper Shipping Name	Not classified as dangerous for transport.
Transport Hazard Class(es)	None	Transport Hazard Class(es)	None
Packing Group	None	Packing Group	None
Hazard Label(s)	None	Hazard Label(s)	None
Environmental Hazards	None	Environmental Hazards	None
Special Precautions For User	None	Special Precautions For User	None
Sea Transport (IMDG) (c)		Air Transport (ICAO/IATA) (c) (d)	
UN Number	None	UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.	Proper Shipping Name	Not classified as dangerous for transport.
Transport Hazard Class(es)	None	Transport Hazard Class(es)	None
Packing Group	None	Packing Group	None
Marine Pollutant	None	Marine Pollutant	None
Special Precautions For User	None	Special Precautions For User	None

(b)- ORM-D may be applicable within the USA for package sizes less than 30kg.

(c)- Consult with transport provider.

(d)- Check relevant regulations for Special Provisions.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health And Environmental Regulations/Legislation Specific For The Substance Or Mixture

United States (USA)

SARA

Section 355 (extremely hazardous substances) Substance is not listed.

SARA 313 (Specific toxic chemical listings) Substance is not listed.

TSCA (Toxic Substance Control Act) Substance is listed.

Proposition 65 (California):

Chemicals known to cause cancer: Substance is not listed.

Chemicals known to cause reproductive toxicity for females: Substance is not listed.

Chemicals known to cause reproductive toxicity for males: Substance is not listed.

Chemicals known to cause developmental toxicity: Substance is not listed.

Carcinogenic Categories

EPA (Environmental Protection Agency) Substance is not listed.

IARC (International Agency for Research on Cancer) Substance is not listed.

TLV (Threshold Limit Value established by ACGIH) Substance is not listed.

MAK (German Maximum Workplace Concentration) Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.

Canada

Canadian Domestic Substances List (DSL) Substance is listed.

Canadian Ingredient Disclosure list (limit 0.1%) Substance is not listed.

Canada Ingredient Disclosure list (limit 1%) Substance is not listed.

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57 Substance is not listed.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Additional information:

- The accumulation of airborne dust particles may lead to health and safety risks in some cases. The use of good industrial practices will mitigate this risk.
- The health risks from inhalation of dust particles vary; this is due to particle concentration, exposure length, number of exposures and type of particles inhaled. Please read Section 2,4,6,7 and 8 of the SDS to understand these potential risks. Wear personal protective equipment and follow storage and handling procedures to maintain a safe workplace.
- In rare instances, combustible dusts may represent a potential explosion hazard when airborne. This hazard is often associated with organic dust such as foodstuffs and coal, but may also occur with mineral products. While the majority of our products would be considered non-combustible, the overall airborne environment should be considered when determining the need for mitigation from the potential hazard. Consult recognized experts when necessary in order to determine any possible hazard.

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Please read the SDS for specific information concerning these hazards, and contact us with any further questions. We appreciate your continued business.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstract Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Sources

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com