

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

Printing date: 08.12.2014

Mullite, Duramul E.G.

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

Revision: 27.06.2018

1.1 Product Identifier Mullite, Duramul E.G. GHS Product Identifier Mullite, Duramul E.G.

Chemical NameAlumina SilicateTrade NameSee Product Identifier

CAS No. 1302-93-8 **EINECS No.** 215-113-2

REACH Registration No. 01-2119517522-47-0005

1.2 Relevant Identified Uses Of The Substance Or Mixture And Uses Advised Against

Application of the

1.3

substance / the mixture

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

REACH Registration Company Information

Company Identification WASHINGTON MILLS ELECTRO MINERALS LTD.

Address MOSLEY ROAD, TRAFFORD PARK

Postal Code/Location MANCHESTER M17 1NR, UNITED KINGDOM

Telephone 0044 (0)161 848 0271 Fax 0044 (0)161 872 2974

Further information obtained from:

Telephone + 0044 (0)161 873 5512

E-Mail (expert) <u>clive.wood@washingtonmills.co.uk</u>

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 (CLP)

The product is not classified as hazardous according to GHS regulations.

The substance is not classified as hazardous according to the CLP regulation.

2.1.2 Classification according to Directive 67/548/EEC & Directive 1999/45/EC – Not applicable.

Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

2.2 Label Elements

2.2.1 Label Elements According to Regulation (EC) No. 1272/2008 (CLP)

Not Regulated

Hazard Pictogram(s)

Not Regulated

Signal

Not Regulated

Word(s)

Hazard-determining

None

components of labelling:

Hazard Statement(s) Not Regulated

Additional information: Safety data sheet available on request.

Hazard description:

WHMIS-symbols: Not hazardous under WHMIS

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NFPA ratings (scale 0 - 4)

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Health = 0 Fire = 0 Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH 0
FIRE 0
REACTIVITY 0

Health = 0Fire = 0Reactivity = 0

HMIS Long Term Health Hazard Substances

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 1302-93-8 mullite

Identification number(s) EC number: 215-113-2

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. Wash with soap and water. If skin irritation is

experienced, consult a doctor.

After Eye Contact: 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

Slight irritant effect on eyes.

And Delayed

Hazards No further relevant information available.

4.3 Indication Of The

Immediate Medical Attention And Special

No further relevant information available.

Treatment Needed

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Use fire extinguishing methods suitable to surrounding conditions.

Media

Unsuitable Extinguishing None.

Media

5.2 Special Hazards Arising No further relevant information available.

From The Substance Or

Mixture

5.3 Advice for Fire-Fighters Wear self-contained respiratory protective device. Wear fully protective suit.

Additional Information No further relevant information available.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	Personal Precautions,	Avoid formation of dust. For large spills, use respiratory protective
	Protective Equipment And	device against the effects of fumes/dust/aerosol. For large spills, wear
	Emergency Procedures	protective clothing. Ensure adequate ventilation.
6.2	Environmental Precautions	No special measure required.
6.3	Methods And Material For	Pick up mechanically. Send for recovery or disposal in suitable
	Containment And Cleaning Up	receptacles. 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	Use only in well ventilated areas. 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.
	Information About Fire – and explosion protection	No special measures required.
7.2	Conditions For Safe Storage, In	ncluding Any Incompatibilities:
	Requirements to be Met by Storerooms and Receptacles:	Store in a cool location.
	Information About Storage in One Common Storage Facility:	Store away from oxidizing agents. Store away from foodstuffs. Do not store together with acids.
	Further information about storage conditions:	Store in cool, dry conditions in well sealed receptacles.
7.3	Specific End Use(s)	No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

	s No further relevan		(0 0)	redients with limit values that require monitoring at the workplace: mullite 1302-93-8 PEL (USA) Long-term value: 15 (total), 5 (resp.) mg/m³		
Additi	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 Personal protective equipment: General protective and hygienic measures: 8.2 Exposure Controls						
3.2.2	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. Wash hands before breaks and at the end of work. Do not inhale dust / smoke / mist. Avoid contact with the eyes and skin.				
			ns of use. For spills, respiratory protection may bry protective device when high concentrations			

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Protection of Hands		Wear protective gloves.
		Not required under normal conditions of use. Protection may be required for spills.
	Risk Management Measures	No special requirements.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information On Basic Physical And Chemical Properties			
	Appearance	Granulate	Color	White
	Odor	Odourless	Odor Threshold (ppm)	Not available
	Melting Point (°C) / Freezing Point (°C)	3344 ° F / 1840 °C	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 (g/ml)	Not available
	Solubility (Water)	Insoluble	Solubility (Other)	Not available
	Partition Coefficient (N- Octanol/Water)	Not available	Viscosity (mPa.s)	Not available
9.2	Other Information	Volatile Organic Chemica	I (VOC) Content – Not 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	Reacts with strong acids and alkali. Reacts with strong oxidizing agents.
10.4	Conditions To Avoid	No further relevant information available.
10.5	Incompatible Materials	No further relevant information available.
10.6	Hazardous Decomposition Product(s)	No dangerous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on Toxicological Effects	
<u>-</u>	Primary irritant effect:	
	On the skin:	No irritant effect on the skin.
	On the eye:	Slight irritant effect on eyes.
	Sensitisation:	No sensitizing effects known.
	Additional toxicological information:	When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us. The substance is not subject to classification according to the latest version of the EU lists.

SECTION 12: ECOLOGICAL INFORMATION

12.1 **Toxicity**

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), Printing date: 08.12.2014 and US GHS

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Aquatic toxicity: No further relevant information available. 12.2 Persistence and Degradability No further relevant information available. 12.3 **Bioaccumulative Potential** No further relevant information available. 12.4 **Mobility in Soil** No further relevant information available.

Additional ecological information:

General notes: Not known to be hazardous for water.

12.5 Results of PBT and vPvB PBT: Not applicable. Assessment vPvB: Not applicable.

Other Adverse Effects No further relevant information available. 12.6

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 **Waste Treatment Methods**

Recommendation Contact waste processors for recycling information. Smaller quantities can

be disposed of with household waste. 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 UN Number** None

Not classified as Not classified as dangerous for Proper Shipping Name Proper Shipping Name dangerous for transport.

transport.

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Transport Hazard Class(es) None Transport Hazard Class(es) None Packing Group Packing Group None None Hazard Label(s) None Hazard Label(s) None **Environmental Hazards** Environmental Hazards None None Special Precautions For User None Special Precautions For User None

Air Transport (ICAO/IATA) (c) (d) Sea Transport (IMDG) (c)

UN Number UN Number None None

Not classified as Not classified as dangerous for Proper Shipping Name Proper Shipping Name

dangerous for transport. transport.

Transport Hazard Class(es) Transport Hazard Class(es) None None Packing Group Packing Group None None Marine Pollutant Marine Pollutant None 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

SECTION 15: REGULATORY INFORMATION

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

USA

SARA

Section 355 (extremely hazardous Substance is not listed.

substances)

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Section 313 (Specific toxic chemical listings) Substance is not listed. TSCA (Toxic Substance Control Act) Substance is listed. Proposition 65 (California): Substance is not listed. Chemicals known to cause cancer: Substance is not listed. Chemicals known to cause reproductive toxicity for females: Chemicals known to cause reproductive Substance is not listed. toxicity for males: Chemicals known to cause developmental Substance is not listed. toxicity: **Carcinogenic Categories** EPA (Environmental Protection Agency) Substance is not listed. IARC (International Agency for Research on Substance is not listed. TLV (Threshold Limit Value established by Substance is not listed. ACGIH) **MAK (German Maximum Workplace** Substance is not listed. Concentration) NIOSH-Ca (National Institute for Substance is not listed. **Occupational Safety and Health)** Canada Canadian Domestic Substances List (DSL) Substance is listed. Canadian Ingredient Disclosure list (limit Substance is not listed. 0.1%) Canada Ingredient Disclosure list (limit 1%) Substance is not listed. Other regulations, limitations and prohibitive regulations This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Substances of very high concern (SVHC) Substance is not listed. according to REACH, Article 57 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.

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:

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



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IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

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GHS: Globally Harmonised System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

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

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

Sources

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