

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), Printing date: 27.06.2018 and US GHS

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

Revision: 27.06.2018

1.1 Product Identifier Sulfur Cake
GHS Product Identifier Sulfur Cake

Chemical Name Mixture (Sulfur/Water/Ash Products)

Trade Name See Product Identifier

CAS No. Not available EINECS No. Not available REACH Registration No. Not available

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

No further relevant information available.

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

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)

Skin Irrit. 2 H315 Causes skin irritation.

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)  $\Diamond$ 

GHS07 Signal Word(s)

Hazard H315 Causes skin irritation.

Statement(s)

**Precautionary** P280 Wear protective gloves / eye protection.

**Statement(s)** P264 Wash thoroughly after handling.

P332+P313 If skin irritation occurs: Get medical advice/attention.

WARNING

P302+P352 IF ON SKIN: Wash with plenty of water.

Hazard description:

NFPA ratings (scale 0 - 4)

110

Health = 1 Fire = 1 Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH 1
FIRE 1
REACTIVITY 0

Health = 1 Fire = 1 Reactivity = 0

HMIS Long Term Health Hazard

None of the ingredients are listed.

Substances 2.3 Other Hazards

Results of PBT PBT: Not applicable. vPvB: Not applicable. assessment

Page: 1/7

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), Printing date: 27.06.2018 and US GHS

Sulfur Cake (See Page 1)

#### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

3.2 Mixtures

**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous Components:** 

Hazardous Ingredient(s)	%W/W	CAS No.	EC No.	Index No.	Hazard Pictogram(s)	Hazard Statement(s)
sulfur	50-100	7704-34-9	231-722-6	016-094-00-1	<b>(!</b> )	Skin Irrit. 2, H315

Additional information: For the wording of the listed risk phrases refer to section 16.

#### **SECTION 4: FIRST AID MEASURES**

**Description of First Aid Measures** 4.1

> **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 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** 

Gastric or intestinal disorders when ingested. No further relevant information available.

4.3 **Indication Of The Immediate Medical** 

**Attention And Special Treatment Needed** 

No further relevant information available.

Irritant to skin and mucous membranes.

#### **SECTION 5: FIRE-FIGHTING MEASURES**

**Extinguishing Media** 

Suitable Extinguishing Use fire extinguishing methods suitable to surrounding conditions.

Agents

**Unsuitable Extinguishing** 

None.

Agents

5.2 **Special Hazards Arising** 

From The Substance Or

Formation of toxic gases is possible during heating or in case of fire.

Mixture 5.3

**Advice for Fire-Fighters** 

Wear self-contained respiratory protective device. Wear fully protective suit.

Additional Information No further relevant information available.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

6.1	Personal Precautions,	Wear protective equipment. Keep unprotected persons away.
	Protective Equipment And	Ensure adequate ventilation. For large spills, use respiratory protective
	Emergency Procedures	device against the effects of fumes/dust/aerosol. Avoid formation of dust.
6.2	<b>Environmental Precautions</b>	No special measures required.
6.3	Methods And Material For	Pick up mechanically. Ensure adequate ventilation. Dispose

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

## Sulfur Cake (See Page 1)

**Containment And Cleaning Up** contaminated material as waste according to item 13. Send for recovery or disposal in suitable receptacles. 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**

**Precautions For Safe** Prevent formation of dust. Do not dry clean dust covered objects and floors. Wash 7.1 Handling thoroughly with plenty of water. Any unavoidable deposit of dust must be regularly

Revision: 27.06.2018

removed. Use only in well ventilated areas. No special measures required.

**Information About** 

Fire - and explosion

protection

7.2

Printing date: 27.06.2018

Conditions For Safe Storage, Including Any Incompatibilities:

Requirements to be Store in a cool location.

Met by Storerooms

Avoid storage near extreme heat, ignition sources or open flame.

Store away from oxidizers, strong acids, strong bases.

and Receptacles:

**Information About** 

Store away from foodstuffs.

Storage in One **Common Storage** 

Facility:

**Further information** 

about storage conditions:

Specific End Use(s) 7.3

No further relevant information available

#### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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

#### **Control Parameters**

#### Ingredients with limit values that require monitoring at the workplace:

None.

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**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	If hydrogen sulfide or sulfur dioxide are present, a NIOSH approved respirator shall be used. Refer to 29CFR1910.134 or European Standard EN 149 for regulations. For bulk quantities handling SCBA apparatus must be worn at all times. A suitable vapor respirator may be worn when handling smaller sample quantities.		
	Eye Protection	Safety glasses.		
	Protection of Hands	Wear protective gloves.		
	<b>Body Protection</b>	Protective work clothing.		
	Limitation and	itation and No further relevant information available.		

**Safety data sheet**According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), Printing date: 27.06.2018 and US GHS

## Sulfur Cake (See Page 1)

supervision of exposure into the environment	
Risk Management	See Section 7 for additional information. No further relevant information available.
Measures	

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

9.1	Information On Basic Physical And Chemical Properties			
	Appearance	Solid	Color	Grey/Black
	Odor	Not available	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 (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 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 and stored according to specifications. To avoid thermal decomposition do not overheat.
10.3	Possibility of Hazardous Reactions	Reacts with strong acids and alkali. Reacts with strong oxidising agents. Toxic fumes may be released if heated above the decomposition point.
10.4	Conditions To Avoid	Excessive heat. Store away from oxidising agents.
10.5	Incompatible Materials	No further relevant information available.
10.6	Hazardous Decomposition Product(s)	Sulphur oxides (SOx) Hydrogen sulphide

#### **SECTION 11: TOXICOLOGICAL INFORMATION**

#### 11.1 **Information on Toxicological Effects** Acute toxicity:

Substance	CAS No.	LD <sub>50</sub> (Oral, Rat)	LC <sub>50</sub> (Inhalation, Rat)	LD <sub>50</sub> (Dermal, Rat)
Sulfur	7704-34-9	2000 mg/kg	No data	No data

**Primary Irritant Effect:** 

On the skin: Irritant to skin and mucous membranes.

On the eye: Slight irritant effect on eyes. Sensitisation: No sensitizing 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



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

## Sulfur Cake (See Page 1)

Acute effects (acute toxicity, irritation, and corrosivity):

Irritating if inhaled, causing symptoms of coughing and shortness of breath. May be harmful if swallowed.

#### **SECTION 12: ECOLOGICAL INFORMATION**

12.1 Toxicity

Aquatic toxicity:

12.2 Persistence and Degradability
12.3 Bioaccumulative Potential
12.4 Mobility in Soil

No further relevant information available.

Additional ecological information:

General notes:

Not known to be hazardous to water.

12.5 Results of PBT and vPvB 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. 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

Revision: 27.06.2018

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

Not classified as dangerous for transport

Transport Hazard Class(es)

None

Packing Group

Hazard Label(s)

None

Angerous for transport.

Transport Hazard Class(es)

None

Packing Group

None

Hazard Label(s)

Transport Hazard Class(es)

None

Hazard Label(s)

None

Hazard Label(s)

Environmental Hazards

None

Special Precautions For User

None

Packing Group

None

Hazard Label(s)

None

Environmental Hazards

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 Proper Shipping Name

Not classified as dangerous for

dangerous for transport.

Transport Hazard Class(es)

None

Transport Hazard Class(es)

None

Transport Hazard Class(es)

None

Transport Hazard Class(es)NoneTransport Hazard Class(es)NonePacking GroupNonePacking GroupNoneMarine PollutantNoneMarine PollutantNoneSpecial Precautions For UserNoneSpecial Precautions For UserNone

(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**

Page: 5/7

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

### Sulfur Cake (See Page 1)

Safety, Health And Environmental Regulation	s/Legislation Specific For The Substance Or Mixtu
USA	
SARA	
Section 355 (extremely hazardous substances)	None of the ingredients are listed.
SARA 313 (Specific toxic chemical listings)	None of the ingredients are listed.
TSCA (Toxic Substance Control Act)	All ingredients are listed.
Proposition 65 (California):	
Chemicals known to cause cancer:	None of the ingredients are listed.
Chemicals known to cause reproductive toxicity for females:	None of the ingredients are listed.
Chemicals known to cause reproductive toxicity for males:	None of the ingredients are listed.
Chemicals known to cause developmental toxicity:	None of the ingredients are listed.
Carcinogenic Categories	
EPA (Environmental Protection Agency)	None of the ingredients are listed.
IARC (International Agency for Research on Cancer)	None of the ingredients are listed.
TLV (Threshold Limit Value established by ACGIH)	None of the ingredients are listed.
MAK (German Maximum Workplace Concentration)	None of the ingredients are listed.
NIOSH-Ca (National Institute for Occupational Safety and Health)	None of the ingredients are listed.
Canada	
Canadian Domestic Substances List (DSL)  Other regulations, limitations and prohibitive	All ingredients are listed.
Substances of very high concern (SVHC) according to REACH, Article 57	None of the ingredients are 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.

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

#### Relevant phrases

Printing date: 27.06.2018

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

## Sulfur Cake (See Page 1)

H315 Causes skin irritation.

R38 Irritating to skin.

#### Abbreviations and acronyms:

Printing date: 27.06.2018

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 Abstracts 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

#### **Sources**

SDS Prepared by:

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