

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), Printing date: 11.06.2018 and US GHS

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

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1.1 Product Identifier Duramet
GHS Product Identifier Duramet
Chemical Name Ferrosilicon

Trade Name See Product Identifier

CAS No. 8049-17-0 EINECS No. 617-088-7 REACH Registration No. Not available

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

Application of the substance/the mixture Product component

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 (CLP)

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

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

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)

This product does not have a classification according to the CLP regulation.

The product is not classified as hazardous according to OSHA GHS regulations within the United States.

Hazard Not regulated Signal Not regulated

Pictogram(s) Word(s)

Hazard-determining components of labelling: None

Hazard Not regulated

Statement(s)
Hazard description:

WHMIS- None

symbols:

NFPA ratings (scale 0 - 4)

000

Health = 0 Fire = 0 Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH 0
FIRE 0
REACTIVITY 0

Health = 0Fire = 0Reactivity = 0

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HMIS Long

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Term Health Substance is not listed Hazard

Substances

2.3 **Other Hazards**

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

assessment

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances **CAS No. Description** 1344-28-1 Ferrosilicon Identification number(s) EC number: 617-088-7

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.

Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for After Swallowing:

Slight irritant effect on eyes. Gastric or intestinal disorders when ingested. Nausea in

medical help immediately.

4.2 **Most Important**

> **Symptoms And** Effects, Both Acute

case of ingestion. **And Delayed**

Hazards No further relevant information available.

4.3 **Indication Of The**

Immediate Medical

Attention And Special **Treatment Needed**

No further relevant information available.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 **Extinguishing Media**

Suitable Extinguishing Use fire extinguishing methods suitable to surrounding conditions.

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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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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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	Do not allow to enter sewers/ surface or ground water.
6.3	Methods And Material For	Pick up mechanically. Dispose contaminated material as waste
	Containment And Cleaning Up	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

	Precautions For Safe	Use only in well ventilated areas. Prevent formation of dust. Do not dry clean dust
7.1	Handling	covered objects and floors. Wash thoroughly with plenty of water. Any unavoidable
		deposit of dust must be regularly removed.
	Information About	No special measures required.
	Fire – and explosion	
	protection	
7.2	Conditions For Safe S	torage, Including Any Incompatibilities:
	Requirements to be	Store in a cool location. Protect from humidity and water.
	Met by Storerooms	
	and Receptacles:	
	Information About	Store away from oxidizing agents. Store away from foodstuffs. Do not store together
	Storage in One	with acids.
	Common Storage	
	Facility:	
	Further information	Store in cool, dry conditions in well sealed receptacles.
	about storage	, ,
	conditions:	
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:					
Ferrosilicon	Ferrosilicon 8049-17-0 PEL (USA) Long-term value: 15 (total), 5 (resp.) mg/m ³				
DNELs No further relevant information available. PNECs No further relevant information available.					
Additional infor	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:		
	General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemic Keep away from foodstuffs, beverages and feed. Wash hands before breaks at the end of work. Immediately remove all soiled and contaminated clothing. Do inhale dust / smoke / mist. Avoid contact with the eyes. Avoid close or long terricontact with the skin.		
	Respiratory Protection	Not required under normal conditions of use. For spills, respiratory protection may be advisable. Use suitable respiratory protective device when high concentrations are present.	
	Eye Protection	Wear safety glasses.	

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Protection of Hands	Wear protective gloves.
Body Protection	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	Grey
	Odor	Odourless	Odor Threshold (ppm)	Not available
	Melting Point (°C) / Freezing Point (°C)	4892 °F/ 2700 °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)	6,7 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	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 oxidising agents.
10.4	Conditions To Avoid	Store away from oxidsing agents. Moisture.
10.5	Incompatible Materials	No further relevant information available.
10.6	Hazardous Decomposition Product(s)	Possible in traces.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on Toxicological Effects Primary Irritant Effect:		
	On the skin:	Slight irritant effect on skin and mucous membranes.	
	On the eye:	Slight irritant effect on eyes.	
	Sensitisation:	No sensitizing effects known.	
	Additional toxicological	When used and handled according to specifications, the	
	information:	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.	
	Acute effects (acute toxicity, irritation and corrosivity):	Inhalation may cause irritation to the respiratory system.	
	Repeated dose toxicity:	Repeated exposure may result in skin sensitivity.	

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SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

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Aquatic toxicity:

No further relevant information available.

Persistence and Degradability

Bioaccumulative Potential

Mobility in Soil

No further relevant information available.

No further relevant information available.

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.
Assessment vPvB: Not applicable.

12.6 Other Adverse Effects No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Recommendation Smaller quantities can be disposed of with household waste. 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

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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 U	JSA) (b)(d)
UN Number	None	UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.	Proper Shipping Name	Not classified as dangerous fo 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 fo 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

SECTION 15: REGULATORY INFORMATION

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



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	SARA	
	Section 355 (extremely hazardous substances)	Substance is not listed.
	Section 313 (Specific toxic chemical listings)	Substance is not listed.
	TSCA (Toxic Substance Control Act)	Not all ingredients 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 listed.
	Other regulations, limitations and prohibitive	e 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.

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

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International Carriage of Dangerous Goods by Road)
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

EINECS: European Inventory of Existing Commercial 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)

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