WASHINGTON MILLS

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

Revision: 06.06.2018

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

1.1	Product Identifier GHS Product Identifier Chemical Name	Boron Carbide Boron Carbide Mixture (Boron Carbide)
	Trade Name CAS No. EINECS No. REACH Registration No.	See Product Identifier Mixture Mixture
1.2	Relevant Identified Uses C Application of the substance / the mixture	of The Substance Or Mixture And Uses Advised Against Product Component
1.3	Details Of The Supplier Of Company Identification Address	The Safety Data Sheet Washington Mills Electro Minerals Corp. 1801 Buffalo Avenue Niagara Falls, NY 14302
	Telephone E-Mail (Competent Person)	(716) 278-6600 info@washingtonmills.com
1.4	Emergency Telephone Nu (800)255-3924 (USA/Canac	mber – ChemTel Ia), 813-248-0585 (International)

Printing date: 06.06.2018

SECTION 2: HAZARDS IDENTIFICATION

2.1	Classification C	of The Substanc	e Or Mixture			
2.1.1			ulation (EC) No. 1272			
					Harmonized System (GHS).	
			azardous according to the			
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					
			EU" in the latest valid ve		cedure of the General Classification	
	Classification s			151011.		
			the latest editions of the	FIL-lists	and extended by company and literature	
	data.	The classification is according to the latest editions of the EU-lists, and extended by company and literature				
		n is in accordanc	e with the latest editions	s of internat	tional substances lists, and is	
					ation provided by the company.	
2.2	Label Elements					
2.2.1	Label Elements	According to R	Regulation (EC) No. 127	72/2008 (C	LP)	
	The product is not classified as hazardous according to OSHA GHS regulations within the United States.					
	This product doe	s not have a clas	ssification according to t	he CLP reg	gulation.	
	Hazard	Not regulated.		Signal	Not regulated.	
	Pictogram(s)	Not regulated.		Word(s)	Not regulated.	
	Hazard-	None.				
	determining					
	components of					
	labelling:	NI / 1 / 1				
	Hazard	Not regulated.				
	Statement(s) Hazard descript	tion				
	WHMIS-					
	symbols:	Not hazardous ur	nder WHMIS.			
	NFPA ratings		Health = 1			
	(scale 0 - 4)		Fire = 0			
	. ,		Reactivity = 0			
		$\mathbf{\nabla}$	-			
1						

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

Printing date: 06.06.2018

Boron Carbide (See Page 1)

	HMIS-ratings (scale 0 - 4)	HEALTH1Health = 1FIRE0Fire = 0Reactivity0
2.3	HMIS Long Term Health Hazard Substances Other Hazards	None of the ingredients are listed.
	Results of PBT and vPvB assessment	PBT: Not applicable. vPvB: Not applicable.

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 Number	Hazard Pictogram(s)	Hazard Statement(s)
iron	≤ 2,5	7439-89-6	231-096-4	NA	None	Substance with a community workplace exposure limit

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

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 And Delayed	No further relevant information available.
	Hazards	May be harmful if inhaled. May be harmful if swallowed.
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 Media	Use fire extinguishing methods suitable to surrounding conditions.
	Unsuitable Extinguishing Media	None.
5.2	Special Hazards Arising From The Substance Or Mixture	No further relevant information available.



-								
	Iron	7439-89-6	EV (Canada)	Long-term value: 1* 5** mg/m ³ as iron;*salts, water-soluble;**welding fume				
DNEL	DNELs No further relevant information available.							
PNEC	PNECs No further relevant information available.							
Additional information: The lists valid during the making were used as basis.								
			5					
8.2	8.2 Exposure Controls							
8.2.2 Personal Protective Equipment:								

The usual precautionary measures are to be adhered to when handling chemicals.

Avoid contact with the eyes and skin. Keep away from foodstuffs, beverages and

Wash hands before breaks and at the end of work. Do not inhale dust / smoke / mist.

conditions: Specific End Use(s)	No further relevant information available.
SECTIO	N 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
ional information abou	t design of technical facilities: No further data; see item 7.

Ingredients with limit values that require monitoring at the workplace:

feed.

		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 S	torage, Including Any Incompatibilities:
	Requirements to be Met by Storerooms and Receptacles:	Store in a cool location. Protect from humidity and water.
	Information About Storage in One Common Storage Facility:	Store away from oxidizing agents. Store away from foodstuffs.
	Further information about storage conditions:	Store in cool, dry conditions in well sealed receptacles.

SECTION 7. HANDI ING AND STORAGE

6.1	Personal Precautions,	Ensure adequate ventilation. Avoid formation of dust. For large spills, use
	Protective Equipment And	respiratory protective device against the effects of fumes/dust/aerosol.
	Emergency Procedures	Towel or mop up material and collect in a suitable container. For a large spill, collect uncontaminated material for possible reuse.
6.2	Environmental Precautions	Do not allow to enter sewers/ surface or ground water.
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 6: ACCIDENTAL RELEASE MEASURES

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

Printing date: 06.06.2018 Boron Carbide (See Page 1) Revision: 06.06.2018

Additional Information

No further relevant information available.

Page: 3/7

5.3 **Advice for Fire-Fighters**

7.3

8.1

Additional

Control Parameters

General protective and

hygienic

measures:

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

Revision: 06.06.2018

Boron Carbide (See Page 1)

	Respiratory Protection	Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. For spills, respiratory protection may be advisable.	
Eye Protection		Wear safety glasses.	
	Protection of Hands	Wear protective gloves.	
	Body Protection	Not required under normal conditions of use. Protection may be required for spills.	
	Limitation and supervision of exposure into the environment	No further relevant information available.	
	Risk Management Measures	No special requirements.	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information On Basic	Physical And Chem	ical Properties	
	Appearance	Granulate	Color	Black
	Odor	Odourless	Odor Threshold (ppm)	Not available
	Melting Point (°C) / Freezing Point (°C)	4262 °F / 2350 °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)	2,52 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 Che	mical (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 alkali. Reacts with strong oxidising agents.
10.4	Conditions To Avoid	Excessive heat. Store away from oxidizing agents.
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 Toxicologica	formation on Toxicological Effects	
	Acute toxicity:		
	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.	

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

Revision: 06.06.2018

Boron Carbide (See Page 1)

Additional toxicological information:	The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version. When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.
Acute effects (acute toxicity, irritation, and corrosivity):	May be harmful if swallowed. May be harmful if inhaled.

SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	
	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:	Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
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	Contact manufacturer for recycling information. Must not be disposed together with household garbage. Do not allow product to reach sewage system. 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



and US GHS

Revision: 06.06.2018

Boron Carbide (See Page 1)

- (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

USA				
SARA				
	ion 355 (extremely hazardous stances)	None of the ingredients are listed.		
TSC	A 313 (Specific toxic chemical listings) A (Toxic Substance Control Act) Dosition 65 (California):	None of the ingredients are listed. All ingredients are listed.		
Che Che	micals known to cause cancer: micals known to cause reproductive ity for females:	None of the ingredients are listed. None of the ingredients are listed.		
Chemicals known to cause reproductive None of the ingredients are listed. toxicity for males:				
	micals known to cause developmental	None of the ingredients are listed.		
	cinogenic Categories			
	(Environmental Protection Agency)	12069-32-8 boron carbide l (oral) 7440-42-8 boron l (oral)		
IAR(Can	C (International Agency for Research on cer)	None of the ingredients are listed.		
TLV ACC	(Threshold Limit Value established by SIH)	None of the ingredients are listed.		
Con	K (German Maximum Workplace centration)	None of the ingredients are listed. None of the ingredients are listed.		
	SH-Ca (National Institute for upational Safety and Health) ada	None of the ingredients are listed.		
Can	adian Domestic Substances List (DSL)	All ingredients are listed.		
	adian Ingredient Disclosure list (limit	None of the ingredients are listed.		
	ada Ingredient Disclosure list (limit 1%) er regulations, limitations and prohibitiv	None of the ingredients are listed. re regulations		
	stances of very high concern (SVHC) ording to REACH, Article 57	None of the ingredients are listed.		
Che	mical Safety Assessment	A Chemical Safety Assessment has not been carr 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:



Safety data sheet

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

Boron Carbide (See Page 1)

- 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:

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) Repr. 1B: Reproductive toxicity, Hazard Category 1B

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