

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), Printing date: 20.11.2014 and US GHS

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

Revision: 20.11.2014

Duramedia 10, 20, F, FB, PK, PK-20, Duralite II **Product Identifier** 1.1 **GHS Product Identifier** Duramedia 10, 20, F, FB, PK, PK-20, Duralite II

Chemical Name Codierite and Alumina; Fired Ceramic Mass Finishing Media

Trade Name See Product Identifier

CAS No. Mixture **EINECS No.** Mixture **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

Preparation of ceramic parts and coatings substance / the mixture

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

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

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

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" quideline 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**

Labelling according to Regulation (EC) No 1272/2008 - Not Regulated 2.2.1

> Hazard Signal Not Regulated Not Regulated Pictogram(s) Word(s)

Hazard-determining components of labelling: None

Hazard Not Regulated

Statement(s)

Hazard description:

WHMIS-Not hazardous under WHMIS.

symbols:

NFPA ratings (scale 0 - 4)

0

Health = 0Fire = 0Reactivity = 0

HMIS-ratings (scale 0 - 4)

0 REACTIVITY 0

Health = 0Fire = 0Reactivity = 0

HMIS Long

Term Health Hazard

13463-67-7 titanium dioxide

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

Duramedia 10, 20, F, FB, PK, PK-20, Duralite II (See Page 1)

Substances 2.3 Other Hazards

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

assessment

Printing date: 20.11.2014

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) and Risk (R) Phrase(s)
aluminium oxide	25-50	1344-28-1	215-691-6	NA	None	substance with a Community workplace exposure limit
magnesium oxide	10-25	1309-48-4	215-171-9	025-199-09-0	None	substance with a Community workplace exposure limit
titanium dioxide	≤ 2,5	13463-67-7	236-675-5	NA		substance with a Community workplace exposure limit

Dangerous Components (Alternative Classifications):

Hazardous Ingredient(s)	%W/W	CAS No.	EC No.	Hazar	d Pictogram(s) and Hazard Statement(s)
titanium dioxide (classification relevant for USA/Canada only)	≤ 2,5	13463-67-7	236-675-5	*	Carc. 2, H351

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

Notable Trace Components (≤ 0,1% w/w):

Hazardous Ingredient(s)	%W/W	CAS No.	EC No.	Haza	ard Pictogram(s) and Hazard Statement(s)
		44404404	000 455 4	×	Xn R48/20
cristobalite	≤ 0,1	14464-46-1	238-455-4		Carc. 1A, H350; STOT RE 2, H373

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: Wash with soap and water. Brush off loose particles from skin. If skin

irritation continues, 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 Slight irritant effect on eyes.

Hazards No further relevant information available.

4.3 Indication Of The Immediate

Medical Attention And Special No further relevant information available.

Treatment Needed

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

Printing date: 20.11.2014

Duramedia 10, 20, F, FB, PK, PK-20, Duralite II (See Page 1)

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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	Personal Precautions,	Avoid formation of dust. For large spills, use respiratory protective device
	Protective Equipment And	against the effects of fumes/dust/aerosol. For large spills, wear protective
	Emergency Procedures	clothing. Ensure adequate ventilation.
6.2	Environmental Precautions	No special measures required.
6.3	Methods And Material For	Pick up mechanically. Clean the affected area carefully; suitable cleaners
	Containment And Cleaning	are: Send for recovery or disposal in suitable receptacles.
	Up	
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** Any unavoidable deposit of dust must be regularly removed. Use only in well Handling ventilated areas. Prevent formation of dust. Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water. **Information About** No special measures required. Fire - and explosion protection 7.2 Conditions For Safe Storage, Including Any Incompatibilities: Requirements to be No special requirements. **Met by Storerooms** and Receptacles: **Information About** Store away from foodstuffs. Storage in One Store away from oxidising agents. **Common Storage** Facility: **Further information** Keep container tightly sealed. 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:					
aluminium oxide	1344-28-1	PEL (USA)	Long-term value: 15* 15** mg/m³ *total dust **respirable fraction		



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

Duramedia 10, 20, F, FB, PK, PK-20, Duralite II (See Page 1)

		REL (USA)	Long-term value: 10* 5** mg/m³ as Al*Total dust**Respirable/pyro powd./welding f.
		TLV (USA)	Long-term value: 1* mg/m³ as Al; *as respirable fraction
		EL (Canada)	Long-term value: 1,0 mg/m³ respirable, as Al
		EV (Canada)	Long-term value: 10 mg/m³ total dust
		PEL (USA)	Long-term value: 15* mg/m³ fume; *total particulate
		TLV (USA)	Long-term value: 10* mg/m³ *as inhalable fraction
magnesium oxide	1309-48-4	EL (Canada)	Short-term value: 10** mg/m³ Long-term value: 10* 3** mg/m³ *inhalable fume;**respirable dust and fume
		EV (Canada)	Long-term value: 10 mg/m³ inhalable
		PEL (USA)	Long-term value: 15* mg/m³ *total dust
		REL (USA)	See Pocket Guide App. A
titanium dioxide	13463-67-7	TLV (USA)	Long-term value: 10 mg/m³ withdrawn from NIC
		EL (Canada)	Long-term value: 10* 3** mg/m³ *total dust;**respirable fraction; IARC 2B
		EV (Canada)	Long-term value: 10 mg/m³ total dust

DNELs No further relevant information available. **PNECs** No further relevant information available.

Printing date: 20.11.2014

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

8.2	Exposure Controls	3			
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. 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.			
	Eye Protection	Safety glasses.			
	Protection of Hands	Wear protective gloves against mechanical hazards.			
	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	See Section 7 for additional information. No further relevant information available.			

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), Printing date: 20.11.2014

and US GHS

Duramedia 10, 20, F, FB, PK, PK-20, Duralite II (See Page 1)

	Appearance	Solid	Color	Yellow
	Odor	Odourless	Odor Threshold (ppm)	Not available
	Melting Point (°C) / Freezing Point (°C)	>2012°F/ >1100 °C	Boiling Point/Boiling Range (°C)	>3632 °F/ >2000 °C
	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 Chemical (VOC) Content – Not Available.				ole.

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.
10.4	Conditions To Avoid	Store away from oxidising agents. Prevent formation of dust.

Incompatible Materials 10.5 No further relevant information available.

10.6 Hazardous Decomposition Product(s) Possible in traces.

11.1 Information on toxicological effects

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: LD₅₀ LC₅₀ LD₅₀ CAS No. **Substance** (Oral, Rat) (Inhalation, Rat) (Dermal, Rat) Silicon dioxide, chemically 7631-86-9 10000 mg/kg 5000 mg/kg No data prepared **Primary Irritant Effect:** On the skin: No irritant effect. On the eye: Slight irritant effect on eyes. Sensitisation: No sensitizing effects known. Additional toxicological The product is not subject to classification according to the information: 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. CMR effects (carcinogenity, Contains known or suspect carcinogens when inhaled. mutagenicity and toxicity for Product is in non-inhalable form and is non-classifiable as a reproduction): carcinogen.

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

Duramedia 10, 20, F, FB, PK, PK-20, Duralite II (See Page 1)

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Printing date: 20.11.2014

Aquatic toxicity:

12.2 Persistence and Degradability
12.3 Bioaccumulative Potential
12.4 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 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: 20.11.2014

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 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
	dangerous for transport.		transport.
Transport Hazard Class(es)	None	Transport Hazard Class(es)	None
Transport Hazard Class(es) Packing Group		Transport Hazard Class(es) Packing Group	•
. ,	None	. ,	None
Packing Group	None None	Packing Group	None 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 United States (USA)



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

Printing date: 20.11.2014

Duramedia 10, 20, F, FB, PK, PK-20, Duralite II (See Page 1)

SARA	
Section 355 (extremely hazardous substan	nces) None of the ingredients are listed.
SARA 313 (Specific toxic chemical listings)) 1344-28-1 aluminium oxide
TSCA (Toxic Substance Control Act)	All ingredients are listed.
Proposition 65 (California):	
Chemicals known to cause cancer:	Reference to Titanium Dioxide is based on unbound respirable particles and is not generally applicable to product as supplied. 13463-67-7 titanium dioxide
Chemicals known to cause reproductive to for females:	oxicity None of the ingredients are listed.
Chemicals known to cause reproductive to for males:	oxicity 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 c Cancer)	on 7631-86-9 silicon dioxide, chemically prepared 3 13463-67-7 titanium dioxide 2B
TLV (Threshold Limit Value established	•
ACGIH)	1309-48-4 magnesium oxide A4
	13463-67-7 titanium dioxide A4
MAK (German Maximum Workplace	1344-28-1 aluminium oxide 2
Concentration)	13463-67-7 titanium dioxide 3A 14464-46-1 cristobalite 1
NIOSH-Ca (National Institute for Occupational Safety and Health)	13463-67-7 titanium dioxide
Canada	
Canadian Domestic Substances List (DSL)) All ingredients are listed.

Canadian Domestic Substances List (DSL)	All ingredients are listed.
Canadian Ingredient Disclosure list (limit 0.1%)	None of the ingredients are listed.
Canada Ingredient Disclosure list (limit 1%)	7631-86-9 silicon dioxide, chemically prepared
	1344-28-1 aluminium oxide

1309-48-4 magnesium oxide

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC)

None of the ingredients are 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



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

Duramedia 10, 20, F, FB, PK, PK-20, Duralite II (See Page 1)

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:

Printing date: 20.11.2014

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

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