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

#### 1.1 Product Identifier

**GHS Product Identifier**

BLASTITE, BLITZBLAST, DURATRED, FASTBLAST, NIAGARA BLAST, EXOBLAST, STANDARD SANDS, DURALUM, DURABLU

**Chemical Name**

Mixture (Brown Aluminum Oxide)

**Trade Name**

See Product Identifier

**CAS No.**

Mixture

**EINECS No.**

REACH Registration No.

01-2119529248-35-0043

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

**Identified Use(s)**

Consult the supplier.

**Uses Advised Against**

Users are recommended to seek further advice.

#### 1.3 Details Of The Supplier Of The Safety Data Sheet

**Company Identification**

Accurate Thermal Syst

**Address**

4104 Sylon Blvd

Hainesport, NJ 08036

**Telephone**

1-800-326-3190

**E-Mail (Competent Person)**

info@accuthermal.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):


### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification Of The Substance Or Mixture

**Classification according to Regulation (EC) No. 1272/2008 (CLP)**

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

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

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

**Additional information:**

Product has less than 0.1% inhalable dust containing known and/or suspect carcinogens per established guidelines, and is therefore not classifiable as a carcinogen.

There are no other hazards not otherwise classified that have been identified.

0% of the mixture consists of component(s) of unknown toxicity.

#### 2.2 Label Elements

**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)**

None

**Hazard-determining components of labelling:**

None

**Hazard**

Not Regulated
2.3 Other Hazards
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.

<table>
<thead>
<tr>
<th>Hazardous Ingredient(s)</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>REACH Registration No.</th>
<th>Hazard Pictogram(s) and Hazard Statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Oxide</td>
<td>&gt;90</td>
<td>1344-28-1</td>
<td>215-691-6</td>
<td>NA</td>
<td>Substance with a Community workplace exposure limit</td>
</tr>
<tr>
<td>Silicon dioxide</td>
<td>&lt;5</td>
<td>7631-86-9</td>
<td>231-545-4</td>
<td>NA</td>
<td>Substance with a Community workplace exposure limit</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>&lt;5</td>
<td>13463-67-7</td>
<td>236-675-5</td>
<td>NA</td>
<td>Substance with a Community workplace exposure limit</td>
</tr>
<tr>
<td>Diiron trioxide / iron (III) oxide</td>
<td>&lt;5</td>
<td>1309-37-1</td>
<td>215-168-2</td>
<td>NA</td>
<td>Substance with a Community workplace exposure limit</td>
</tr>
</tbody>
</table>

Dangerous Components (Alternative Classifications):

<table>
<thead>
<tr>
<th>Hazardous Ingredient(s)</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>Hazard Pictogram(s) and Hazard Statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide</td>
<td>&lt;5</td>
<td>13463-67-7</td>
<td>3.6/2 H351</td>
</tr>
</tbody>
</table>

3.3 Additional Information: Non-classification as a carcinogen is based on non-inhalable form of product. IARC listings for titanium dioxide note that substance must be respirable.

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
Slight irritant effect on eyes.
SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media
Suitable Extinguishing Media Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special Hazards Arising From The Substance Or Mixture No further relevant information available.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment And Emergency Procedures Avoid formation of dust. For large spills, wear protective clothing. For large spills, use respiratory protective device against the effects of fumes/dust/aerosol. Ensure adequate ventilation.

6.2 Environmental Precautions No special measures required.

6.3 Methods And Material For Containment And Cleaning Up Pick up mechanically. Send for recovery or disposal in suitable 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 Any unavoidable deposit of dust must be regularly removed. Use only in well ventilated areas. Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water. Prevent formation of dust.

7.2 Conditions For Safe Storage, Including Any Incompatibilities: Requirements to be Met by Storerooms and Receptacles: No special requirements.

Information About Storage in One Common Storage Facility: Further information about storage conditions: None.

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:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aluminum Oxide</strong></td>
<td>1344-28-1</td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 15*; 15** mg/m³</td>
</tr>
<tr>
<td></td>
<td>Total dust; **Respirable fraction</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 10* 5** mg/m³</td>
</tr>
<tr>
<td></td>
<td>As Al; *Total dust **Respirable/pyro powd./welding f.</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 1* mg/m³</td>
</tr>
<tr>
<td></td>
<td>as Al; *as respirable fraction</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 1.0 mg/m³</td>
</tr>
<tr>
<td></td>
<td>respirable, as Al</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>total dust</td>
</tr>
<tr>
<td><strong>Silicon dioxide</strong></td>
<td>7631-86-9</td>
</tr>
<tr>
<td>NIOSH REL (USA)</td>
<td>Long-term value: 6 mg/m³</td>
</tr>
<tr>
<td>OSHA PEL (USA)</td>
<td>Long-term value: 80 mg/m³</td>
</tr>
<tr>
<td><strong>Titanium Dioxide</strong></td>
<td>13463-67-7</td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 15* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>See Pocket Guide App. A</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>withdrawn from NIC</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Long-term value: 10* 3** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*total dust; **respirable fraction; IARC 2B</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td>total dust</td>
</tr>
<tr>
<td><strong>Diiron trioxide / iron (III) oxide</strong></td>
<td>1309-37-1</td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>Long-term value: 10* 15** 5***mg/m³</td>
</tr>
<tr>
<td></td>
<td>*Fume; Rouge: **Total dust, ***respirable</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Dust &amp; fume, as Fe</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Long-term value: 5* mg/m³</td>
</tr>
<tr>
<td></td>
<td>*as respirable fraction</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 10** mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 5* 10*** 3**** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*dust &amp; fume **fume; Rouge: ***total dust ****resp.</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 5* 10** mg/m³</td>
</tr>
<tr>
<td></td>
<td>*respirable, including Rouge; **total dust</td>
</tr>
</tbody>
</table>

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

### 8.2 Exposure Controls

**Personal protective equipment:**

**General protective and hygienic measures:**

- The usual precautionary measures are to be adhered to when handling chemicals. Wash hands before breaks and at the end of work. Immediately remove all soiled and contaminated clothing. Keep away from foodstuffs, beverages and feed.

**Respiratory Protection**

- 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**

- No further relevant information available.
9. Risk Management Measures
   No further relevant information available. See Section 7 for additional information.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information On Basic Physical And Chemical Properties
   Appearance: Solid granular product
   Odor: Odorless
   Melting Point (°C): Not available
   Freezing Point (°C): Not available
   Flash Point (°C): No Data
   Auto Ignition Temperature (°C): Not available
   Explosive Properties: None
   Flammability (Solid, Gas): Not available
   Evaporation Rate: N/A
   Vapor Density (Air=1): N/A
   Solubility (Water): Insoluble
   Partition Coefficient (N-Octanol/Water): Not available

   Odor Threshold (ppm): Not available
   Boiling Point/Boiling Range (°C): Not available
   Explosive Limit Ranges: Not available
   Decomposition Temperature (°C): 4892 ° F / 2700 ° C
   Oxidizing Properties: Not available
   Density (g/ml): Not available
   Solubility (Other): Not available
   Viscosity (mPa.s): Not available

9.2 Other Information
   Volatile Organic Chemical (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
   As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion.

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)
   Toxic metal oxide smoke.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects
   LD/LC50 values relevant for classification:
   13463-67-7 titanium dioxide
   | Oral     | LD50 | > 20000 mg/kg (rat) |
   | Dermal   | LD50 | >10000 mg/kg (rabbit) |
   | Inhalative | LC50/4 h | > 6.82 mg/l (rat) |

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 information:
   The substance is not subject to classification according to the latest version of the EU lists.
   CMR effects (carcinogenity, mutagenicity, and toxicity for reproduction):
   Product is in non-inhalable form and is nonclassifiable as a carcinogen.

SECTION 12: ECOLOGICAL INFORMATION
12.1 Toxicity

Aquatic toxicity: No data

12.2 Persistence and Degradability

Inorganic product, is not eliminable from water by means of biological cleaning processes.

12.3 Bioaccumulative Potential

Does not accumulate in organisms.

12.4 Mobility in Soil

No further relevant information available.

Additional ecological information:

General notes: Generally not hazardous for water. Due to consistence and the low water solubility of the product a bioavailability is not probable. Due to available data on eliminability/decomposition and bioaccumulation potential a prolonged damage of the environment is unlikely.

12.5 Results of PBT and vPvB Assessment

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 manufacturer for recycling information. Contact waste processors for recycling information. On the basis of the necessary technical regulations and after consultation with the disposal agent and the relevant authorities, can be disposed of with domestic waste or incinerated with domestic waste.

Uncleaned Packaging Recommendation: Packaging may be reused or recycled after cleaning. Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>Land Transport (ADR/RID) (c)(d)</th>
<th>Land Transport (Within USA) (b)(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number</td>
<td>None</td>
</tr>
<tr>
<td>Proper Shipping Name</td>
<td>Not classified as dangerous for transport.</td>
</tr>
<tr>
<td>Transport Hazard Class(es)</td>
<td>None</td>
</tr>
<tr>
<td>Packing Group</td>
<td>None</td>
</tr>
<tr>
<td>Hazard Label(s)</td>
<td>None</td>
</tr>
<tr>
<td>Environmental Hazards</td>
<td>None</td>
</tr>
<tr>
<td>Special Precautions For User</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sea Transport (IMDG) (c)</th>
<th>Air Transport (ICAO/IATA) (c)(d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number</td>
<td>None</td>
</tr>
<tr>
<td>Proper Shipping Name</td>
<td>Not classified as dangerous for transport.</td>
</tr>
<tr>
<td>Transport Hazard Class(es)</td>
<td>None</td>
</tr>
<tr>
<td>Packing Group</td>
<td>None</td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>None</td>
</tr>
<tr>
<td>Special Precautions For User</td>
<td>None</td>
</tr>
</tbody>
</table>

(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
Safety data sheet
Revision: 05.06.2018

SARA

| Section 355 (extremely hazardous substances)  | None of the ingredients are listed. |
| SARA 313 (Specific toxic chemical listings)  | Aluminum oxide listing is only relevant to fibrous forms and is not applicable to the product as supplied. |
| TSCA (Toxic Substance Control Act)           | All ingredients are listed. |
| Proposition 65 (California):                 | References to chemical components listed below are based on unbound respirable particles and are not generally applicable to product as supplied. |
| Chemicals known to cause cancer:             | 13463-67-7 titanium dioxide |
| 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) | 7631-86-9 silicon dioxide 3 |
| TLV (Threshold Limit Value established by ACGIH) | 13463-67-7 titanium dioxide 2B |
| MAK (German Maximum Workplace Concentration) | 13409-37-1 diiron trioxide / iron (III) oxide 3 |
| NIOSH-Ca (National Institute for Occupational Safety and Health) Canada | 1344-28-1 aluminium oxide  |
| 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%) | 13463-67-7 titanium dioxide 3A |
| 1344-28-1 aluminium oxide 2B |
| 1309-37-1 diiron trioxide / iron (III) oxide 4 |
| 13463-67-7 titanium dioxide 3A |
| 1309-37-1 diiron trioxide / iron (III) oxide 4 |
| 13463-67-7 titanium dioxide 3A |

Other regulations, limitations and prohibitive regulations

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.

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 Abstract Inventory of Existing Commercial Chemical Substances
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
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 America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtelinc.com