

Safety data sheet

Printing date: 20.08.2015



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

Revision: 20.08.2015

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

| | | |
|------------|--|--|
| 1.1 | Product Identifier | Duralum Special White - AB, BP, RF, SK, S2, LAP/F, REF, VLD |
| | GHS Product Identifier | Duralum Special White - AB, BP, RF, SK, S2, LAP/F, REF, VLD |
| | Chemical Name | Mixture (White Aluminum Oxide) |
| | Trade Name | See Product Identifier |
| | CAS No. | 1344-28-1 |
| | EINECS No. | 215-691-6 |
| | REACH Registration No. | 01-2119529248-35-0043 |
| 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 |
| | Address | 1801 Buffalo Avenue Niagara Falls, NY 14302 |
| | Telephone | 1-800-828-1666 |
| | E-Mail (Competent Person) | info@washingtonmills.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) | clive.wood@washingtonmills.co.uk |
| 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 product is not classified as hazardous according to the OSHA GHS regulation within the United States. The product is not classified as hazardous according to the CLP regulation. |
| | Additional information: | 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 | |
| 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 |
| | Pictogram(s) | |
| | Hazard-determining components of labelling: | None |
| | Hazard | Not regulated |
| | Statement(s) | |
| | NFPA ratings (scale 0 - 4) | <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> Health = 0 Fire = 0 Reactivity = 0 </div> </div> |
| | HMIS-ratings (scale 0 - 4) | <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> Health = 0 Fire = 0 Reactivity = 0 </div> </div> |
| | HMIS Long Term Health Hazard | None of the ingredients are listed. |

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| | | |
|-----|--|---|
| 2.3 | Substances Other Hazards Results of PBT and vPvB assessment | PBT: Not applicable. vPvB: Not applicable. |
|-----|--|---|

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
CAS No. Description
1344-28-1 aluminum oxide
Identification number(s)
EC number: 215-691-6

SECTION 4: FIRST AID MEASURES

| | | |
|-----|--|--|
| 4.1 | Description of First Aid Measures General Information: After Inhalation: After Skin Contact: After Eye Contact: After Swallowing: | No special measures required. Supply fresh air; consult doctor in case of complaints. Brush off loose particles from skin. Wash with soap and water. If skin irritation is experienced, consult a doctor. 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 medical help immediately. |
| 4.2 | Most Important Symptoms And Effects, Both Acute And Delayed Hazards | Slight irritant effect on eyes. 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 Media Unsuitable Extinguishing Media | Use fire extinguishing methods suitable to surrounding conditions. None. |
| 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. No further relevant information available. |

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 |

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| | | |
|-----|-----------------------------|---|
| 6.4 | Reference To Other Sections | 13. |
| | | 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. |
| | Information About Fire – and explosion protection | No special measures required. |
| 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: | Store away from oxidizing agents. Store away from foodstuffs. Do not store together with acids. |
| | 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:

| | | | |
|----------------|-----------|-------------|--|
| Aluminum Oxide | 1344-28-1 | PEL (USA) | Long-term value: 15*; 15** mg/m ³ *Total dust; ** Respirable fraction |
| | | REL (USA) | Long-term value: 10* 5** mg/m ³ As Al *Total dust **Respirable/pyro powd./welding f. |
| | | TLV (USA) | Long-term value: 1* mg/m ³ as Al; *as respirable fraction |
| | | EL (Canada) | Long-term value: 1,0 mg/m ³ respirable, as Al |
| | | EV (Canada) | Long-term value: 10 mg/m ³ total dust |

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

Personal protective equipment:



General protective and hygienic measures:

| | | |
|-------|--|--|
| 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. Wash hands before breaks and at the end of work. Avoid contact with the eyes. Do not inhale dust / smoke / mist. Avoid close or long term contact with the skin. Keep away from foodstuffs, beverages and feed. |
| | 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. |

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| | | |
|---|---------------------------------|--|
|  | 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. |
| | 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 | Powder | Color |
| | Odor | Characteristic | Odor Threshold (ppm) |
| | Melting Point (°C) / Freezing Point (°C) | 2050 °C (3812 °F) | Boiling Point/Boiling Range (°C) |
| | Flash Point (°C) | No Data | Explosive Limit Ranges |
| | Auto Ignition Temperature (°C) | Not available | Decomposition Temperature (°C) |
| | Explosive Properties | None | Oxidizing Properties |
| | Flammability (Solid, Gas) | Not available | Ph (Value) |
| | Evaporation Rate | N/A | Vapor Pressure (mm Hg) |
| | Vapor Density (Air=1) | N/A | Density (g/ml) |
| | Solubility (Water) | Insoluble | Solubility (Other) |
| | Partition Coefficient (N-Octanol/Water) | Not available | Viscosity (mPa.s) |
| 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 | Reacts with strong acids and alkali. Reacts with strong oxidising agents. |
| 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) | Possible in traces. |

SECTION 11: TOXICOLOGICAL INFORMATION

| | | |
|-------------|--|---|
| 11.1 | Information on Toxicological Effects | |
| | LD/LC50 values relevant for classification: None | |
| | 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 (carcinogenicity, mutagenicity, and toxicity for reproduction): | No further relevant information available. |

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SECTION 12: ECOLOGICAL INFORMATION

| | |
|--|--|
| 12.1 Toxicity | No data |
| Aquatic toxicity: | No further relevant information available. |
| 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. |
| 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 | 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 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 |
| <p>(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.</p> | | | |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | | | |

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SECTION 15: REGULATORY INFORMATION

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

USA

SARA

Section 355 (extremely hazardous substances) Substance is not listed.

Section 313 (Specific toxic chemical listings) Substance is listed.

TSCA (Toxic Substance Control Act) Substance is 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) 1344-28-1 aluminium oxide A4

MAK (German Maximum Workplace Concentration) 1344-28-1 aluminium oxide 2

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 regulations

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Substances of very high concern (SVHC) Substance is not 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

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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 Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

Sources

SDS Prepared by:

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