

Safety data sheet

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


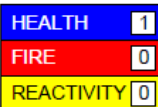
Printing date: 06.06.2018

Revision: 06.06.2018

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

| | | |
|------------|--|--|
| 1.1 | Product Identifier | Bauxite Spinel, BXS-65, BXS-70, BXS-A72 |
| | GHS Product Identifier | Bauxite Spinel, BXS-65, BXS-70, BXS-A72 |
| | Chemical Name | Mixture (Magnesium Aluminum Oxide) |
| | 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 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 |
| 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 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 data. | | |
| | 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 | Labelling according to Regulation (EC) No 1272/2008 – Not Regulated | | |
| | Hazard | Not Regulated | Signal Word(s) Not Regulated |
| | Pictogram(s) | None | |
| | Hazard-determining components of labelling: None | | |
| | Hazard Statement(s) | Not Regulated | |
| | Hazard description: | | |
| | WHMIS-symbols: | None | Not hazardous under WHMIS |
| | NFPA ratings (scale 0 - 4) |  | Health = 1 Fire = 0 Reactivity = 0 |
| | HMIS-ratings (scale 0 - 4) |  | Health = 1 Fire = 0 Reactivity = 0 |
| | HMIS Long Term Health | None of the ingredients are listed. | |

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| | | |
|-----|---|---|
| 2.3 | Hazard Substances 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.

Dangerous components:

| Hazardous Ingredient(s) | %W/W | CAS No. | EC No. | Hazard Pictogram(s) | Hazard Statement(s) |
|------------------------------------|-------|------------|-----------|--|---|
| Aluminium oxide | 60-80 | 1344-28-1 | 215-691-6 | None | Substance with a Community workplace exposure limit |
| Magnesium oxide | 20-40 | 1309-48-4 | 215-171-9 | None | Substance with a Community workplace exposure limit |
| Silicon dioxide | <5 | 7631-86-9 | 231-545-4 |  | Carc. 2, H351 |
| Titanium dioxide | <5 | 13463-67-7 | 236-675-5 | None | Substance with a Community workplace exposure limit |
| Diiron trioxide / iron (III) oxide | <5 | 1309-37-1 | 215-168-2 | None | Substance with a Community workplace exposure limit |

Dangerous Components (Alternative Classifications):

| Hazardous Ingredient(s) | %W/W | CAS No. | EC No. | Hazard Pictogram(s) | Hazard Statements(s) |
|--|------|------------|-----------|---|----------------------|
| titanium dioxide (classification relevant for USA/Canada only) | <5 | 13463-67-7 | 236-675-5 |  | Carc. 2 H351 |

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. 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

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| | |
|--|--|
| Suitable Extinguishing Agents | Use fire extinguishing methods suitable to surrounding conditions. |
| Unsuitable Extinguishing Agents | None. |
| 5.2 Special Hazards Arising From The Substance Or Mixture | No further relevant information available. |
| 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, Protective Equipment And Emergency Procedures | Ensure adequate ventilation. Avoid formation of dust. For large spills, use respiratory protective device against the effects of fumes/dust/aerosol. For large spills, wear protective clothing. |
| 6.2 Environmental Precautions | Do not allow to enter sewers/ surface or ground water. |
| 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 | 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 Storage, Including Any Incompatibilities: Requirements to be Met by Storerooms and Receptacles: | No special requirements. |
| Information About Storage in One Common Storage Facility: | Do not store together with acids. Store away from foodstuffs. Store away from oxidising agents. |
| Further information about storage conditions: | Store in cool, dry conditions in well sealed receptacles. |
| 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/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 |

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| | | | |
|---------------------------------------|------------|-------------|--|
| | | EL (Canada) | Long-term value: 1,0 mg/m ³ respirable, as Al |
| | | EV (Canada) | Long-term value: 10 mg/m ³ total dust |
| magnesium oxide | 1309-48-4 | PEL (USA) | Long-term value: 15* mg/m ³ fume; *total particulate |
| | | TLV (USA) | Long-term value: 10* mg/m ³ *as inhalable fraction |
| | | EL (Canada) | Short-term value: 10** mg/m ³ Long-term value: 10* 3** mg/m ³ *inhalable fume; **respirable dust and fume |
| | | EV (Canada) | Long-term value: 10 mg/m ³ inhalable |
| titanium dioxide | 13463-67-7 | PEL (USA) | Long-term value: 15* mg/m ³ *total dust |
| | | REL (USA) | See Pocket Guide App. A |
| | | TLV (USA) | Long-term value: 10 mg/m ³ withdrawn from NIC |
| | | EL (Canada) | Long-term value: 10* 3** mg/m ³ *total dust; **respirable fraction; IARC 2B |
| | | EV (Canada) | Long-term value: 10 mg/m ³ total dust |
| diiron trioxide / iron (III) oxide | 1309-37-1 | PEL (USA) | Long-term value: 10* 15** 5*** mg/m ³ *Fume; Rouge: **Total dust, ***respirable |
| | | REL (USA) | Long-term value: 5 mg/m ³ Dust & fume, as Fe |
| | | TLV (USA) | Long-term value: 5* mg/m ³ *as respirable fraction |
| | | EL (Canada) | Short-term value: 10** mg/m ³ Long-term value: 5* 10*** 3**** mg/m ³ *dust & fume**fume; Rouge: ***total dust****resp. |
| | | EV (Canada) | Long-term value: 5* 10** mg/m ³ *respirable, including Rouge; **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. Keep away from foodstuffs, beverages and feed. Do not inhale dust / smoke / mist. Avoid contact with the eyes and skin. Wash hands before breaks and at the end of work.

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.

Body Protection: Not required under normal conditions of use. Protection may be required for spills.

Limitation and supervision of No special requirements.

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exposure into the environment

Risk Management Measures No special requirements.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information On Basic Physical And Chemical Properties

| | | | |
|--|-------------------------------|---------------------------------------|---|
| Appearance | Granulate | Color | Black |
| Odor | Odourless | Odor Threshold (ppm) | Not available |
| Melting Point (°C) / Freezing Point (°C) | 3812° F / 2100 °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) | Product is not flammable | Ph (Value) | Not available |
| Evaporation Rate | N/A | Vapor Pressure (mm Hg) | Not available |
| Vapor Density (Air=1) | N/A | Density at 20 °C (g/cm ³) | 3,76 g/cm ³ |
| Solubility (Water) | Insoluble | Solubility (Other) | Not available |
| Self-igniting | Product is not self-igniting. | Danger of explosion | Product does not present an explosion hazard. |
| Partition Coefficient (N-Octanol/Water) | Not available | Viscosity (mPa.s) | Not available |

9.2 Other Information No further relevant information available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical Stability

Thermal Decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

10.3 Possibility of Hazardous Reactions Reacts with strong oxidizing agents. Reacts with strong acids and alkali.

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

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: No irritant effect.

On the eye: Slight irritant effect on eyes.

Sensitisation: No sensitizing effects known.

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.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): Contains known or suspect carcinogens when inhaled. Product is in non-inhalable form and is non-classifiable as a carcinogen.

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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: | Not known to be hazardous to 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 manufacturer 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: Recommended cleansing agents: | Disposal must be made according to official regulations. Water, if necessary together with cleansing agents. |

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 |

(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 Not Applicable

SECTION 15: REGULATORY INFORMATION

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

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| | |
|---|--|
| United States (USA) | |
| SARA | |
| Section 355 (extremely hazardous substances) | None of the ingredients are listed. |
| Section 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): | |
| Chemicals known to cause cancer: | References to chemical components listed below are based on unbound respirable particles and are not generally applicable to product as supplied. 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) | 13463-67-7 titanium dioxide 2B 7631-86-9 silicon dioxide, chemically prepared 3 1309-37-1 diiron trioxide / iron (III) oxide 3 |
| TLV (Threshold Limit Value established by ACGIH) | |
| | 1344-28-1 aluminium oxide A4 1309-48-4 magnesium oxide A4 13463-67-7 titanium dioxide A4 1309-37-1 diiron trioxide / iron (III) oxide A4 1344-28-1 aluminium oxide 2 |
| MAK (German Maximum Workplace Concentration) | |
| | 13463-67-7 titanium dioxide 3A |
| 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 Ingredient Disclosure list (limit 0.1%) | None of the ingredients are listed. |
| Canada Ingredient Disclosure list (limit 1%) | 1344-28-1 aluminium oxide 1309-48-4 magnesium oxide 7631-86-9 silicon dioxide, chemically prepared 1309-37-1 diiron trioxide / iron (III) oxide |
| 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.

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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 Harmonized 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)

Sources

SDS Prepared by:

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*Data compared to the previous version altered.