WASHINGTON MILLS

Duramedia 120, 120C, 140, HDA, XM, XA, Duralum XMS, Duralum XM

Safety Data Sheet

US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 10/26/2023 Version: 1.0

SECTION 1: Identification

1.1. Identification

| Product form | : | Mixture |
|-------------------------------|---|--|
| Product name | : | Duramedia 120, 120C, 140, HDA, XM, XA, Duralum XMS, Duralum XM |
| Other means of identification | : | Fired Ceramic Mass Finishing Media |

1.2. Recommended use and restrictions on use

Use of the substance/mixture

: General refractory applications

1.3. Supplier

Washington Mills 1801 Buffalo Avenue Niagara Falls, NY 14302 T 1-800-828-1666 info@washingtonmills.com

_____Q._______

1.4. Emergency telephone number

Emergency number

: Toll free 1-800-424-9300 (USA & Canada) International: +1-703-527-3887 813-248-0585 [CHEMTREC]

May cause damage to organs (brain) through prolonged or

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Specific target organ toxicity (repeated exposure) Category 2

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US) Hazard statements (GHS US) Precautionary statements (GHS US) Warning

:

May cause damage to organs (brain) through prolonged or repeated exposure (Inhalation)

repeated exposure (Inhalation)

- : Do not breathe dust.
 - Get medical advice/attention if you feel unwell.

Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

| Name | Product identifier | % |
|-------------------|--------------------|-------|
| | CAS-No.: 1313-13-9 | 1 – 7 |
| Manganese dioxide | | |

The specific chemical\ component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents. Refer to the 'Technical Data Sheet' for the product composition.

SECTION 4: First-aid measures

4.1. Description of first aid measures First-aid measures general : Get medical advice/attention if you feel unwell. First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. First-aid measures after skin contact : Wash skin with plenty of water. First-aid measures after eye contact : Rinse eyes with water as a precaution. Do not rub eye. Remove contact lenses, if present and easy to do. Continue rinsing. First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

| SECTION 5: Fire-fighting measures | | |
|---|--|--|
| 5.1. Suitable (and unsuitable) extinguishing media | | |
| Suitable extinguishing media | : Water spray. Dry powder. Foam. | |
| 5.2. Specific hazards arising from the chemi | ical | |
| No additional information available | | |
| 5.3. Special protective equipment and precautions for fire-fighters | | |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. | |

| SECTION 6: Accidental release measures 6.1. Personal precautions, protective equipment and emergency procedures | |
|--|---|
| | |
| Emergency procedures | : Ventilate spillage area. Do not breathe dust. |
| 6.1.2. For emergency responders | |
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| 6.2. Environmental precautions | |

Avoid release to the environment.

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6.3. Methods and material for containment and cleaning up Methods for cleaning up : Mechanically recover the product. Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

| SECTION 7: Handling and storage | |
|--------------------------------------|---|
| 7.1. Precautions for safe handling | |
| Precautions for safe handling | : Ensure good ventilation of the work station. Wear personal protective equipment. Do not breathe dust. |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |
| 7.2. Conditions for safe storage, in | cluding any incompatibilities |
| Storage conditions | : Store in a well-ventilated place. Keep cool. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Duramedia 120, 120C, 140, HDA, XM, XA,Duralum XMS,Duralum XM |
|--|
| No additional information available |
| Manganese dioxide (1313-13-9) |
| No additional information available |

8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls Ensure good ventilation of the work station.Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

| Hand protection: | |
|--|--|
| Protective gloves | |
| Eye protection: | |
| Safety glasses | |
| Skin and body protection: | |
| Wear suitable protective clothing | |
| Respiratory protection: | |
| In case of insufficient ventilation, wear suitable respiratory equipment | |
| Wear suitable protective clothing Respiratory protection: | |

Personal protective equipment symbol(s):



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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state | : Solid |
|---|---------------------------------|
| Appearance | : A granular synthetic mineral. |
| Color | brown |
| Odor | : odorless |
| Odor threshold | : No data available |
| рН | : No data available |
| Melting point | : No data available |
| Freezing point | : > 2012 °F |
| Boiling point | : > 3632 °F |
| Flash point | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability | : Non flammable. |
| Vapor pressure | : No data available |
| Relative vapor density at 20°C | : No data available |
| Relative density | : No data available |
| Density | : 3.5 kg/l |
| Solubility | : Material insoluble in water. |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : Not classified. |
| Oxidizing properties | : Not oxidising. |
| | |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid dust formation.

10.5. Incompatible materials

Strong acids. alkalis. Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Acute toxicity (oral) | : | Not classified |
|-----------------------------|---|----------------|
| Acute toxicity (dermal) | : | Not classified |
| Acute toxicity (inhalation) | : | Not classified |

Manganese dioxide (1313-13-9)

| LD50 oral rat | > 3480 mg/kg |
|-----------------------------------|---|
| ATE US (oral) | 500 mg/kg body weight |
| ATE US (gases) | 4500 ppmV/4h |
| ATE US (vapors) | 11 mg/l/4h |
| ATE US (dust, mist) | 1.5 mg/l/4h |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : May cause damage to organs (brain) through prolonged or repeated exposure (Inhalation). |

Manganese dioxide (1313-13-9)

| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure. |
|------------------------|--|
| Aspiration hazard | Not classified |
| Viscosity, kinematic : | No data available |

| SECTION 12: Ecological in | Iformation |
|---------------------------|--|
| 12.1. Toxicity | |
| Ecology - general | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. |
| | |

| o () | |
|----------------------|--|
| LC50 - Fish [1] | > 100 mg/l Source: Existing Chemical Safety Test Summary of MOE |
| EC50 - Crustacea [1] | > 100 mg/l Source: ECHAExisting Chemical Safety Test Summary of MOE |
| NOEC chronic fish | 0.55 mg/l Test organisms (species): Salvelinus fontinalis Duration: '65 d' |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

| · ··=· •·· • • • • • • • • • • • • • • • | |
|--|--|
| Proper Shipping Name (DOT) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) | Not applicableNot applicableNot applicable |
| 14.3. Transport hazard class(es) | |
| DOT Transport hazard class(es) (DOT) | : Not applicable |
| IMDG Transport hazard class(es) (IMDG) | : Not applicable |
| IATA Transport hazard class(es) (IATA) | : Not applicable |
| 14.4. Packing group | |
| Packing group (DOT) Packing group (IMDG) Packing group (IATA) | Not applicableNot applicableNot applicable |

14.5. Environmental hazards

Other information

14.6. Special precautions for user

DOT

No data available

IMDG

No data available

ΙΑΤΑ

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

: No supplementary information available.

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This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

Titanium dioxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

Cristobalite (14464-46-1)

Listed as carcinogen on NTP (National Toxicology Program)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

| Component | State or local regulations |
|------------------------------|---|
| Aluminum oxides(1344-28-1) | U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York City - Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List |
| Manganese dioxide(1313-13-9) | U.S New York City - Right to Know Hazardous Substances List |
| Diiron trioxide(1309-37-1) | U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York City - Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List |
| Titanium dioxide(13463-67-7) | U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S New York City - Right to Know Hazardous Substances List; U.S Pennsylvania - RTK (Right to Know) List |
| Cristobalite(14464-46-1) | U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List |

SECTION 16: Other information

| US-SDS according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) | | |
|--|--|--|
| Other information | : None of Washington Mills products contains minerals and inorganic components in its whiskers | |
| | forms. All hazards are derived based on the chemical properties of the corresponding elements. | |

ICSDS SDS USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.