



Guidon X

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)
Issue date: 5/1/2015 Revision date: 1/30/2026 Supersedes: 4/19/2023

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : Guidon X
CAS-No. : Mixture
Product code : Brand Code 1780 Mix3800

1.2. Other means of identification

Other means of identification : Magnesia-Chrome Brick

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Refractory Brick
Recommended use : Industrial use

1.4. Supplier's details

RHI Magnesita
425 South Salem Church Road
York, PA, 17408
United States
T 717-792-3611
[Resco SDS.TDS@rhimagnesita.com](mailto:Resco_SDS.TDS@rhimagnesita.com) - WWW.RescoProducts.com

1.5. Emergency phone number

Emergency number : EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300
Outside USA & Canada +1 703-741-5970

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

| | | |
|---|------|-----------------------------------|
| Skin corrosion/irritation, Category 2 | H315 | Causes skin irritation. |
| Serious eye damage/eye irritation, Category 2B | H320 | Causes eye irritation. |
| Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation | H335 | May cause respiratory irritation. |

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
Hazard statements (GHS US) : Dust from sawing or tear out may irritate eye.
H315 - Causes skin irritation
H320 - Causes eye irritation
H335 - May cause respiratory irritation
Precautionary statements (GHS US) : P260 - Do not breathe Dust when sawing or tear out.
P280 - Wear protective gloves, eye protection, Safety shoes.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|------------------------------|--------------------|---------|-----------------------|
| Magnesium Oxide | CAS-No.: 1309-48-4 | 30 – 60 | Not classified |
| chromium(III) oxide | CAS-No.: 1308-38-9 | 10 – 30 | Not classified |
| iron(III) oxide | CAS-No.: 1309-37-1 | 10 – 30 | Not classified |
| aluminium oxide, non-fibrous | CAS-No.: 1344-28-1 | 5 – 10 | Not classified |

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Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : Never give anything by mouth to an unconscious person. |
| First-aid measures after inhalation | : Remove the victim into fresh air. |
| First-aid measures after skin contact | : Gently wash with plenty of soap and water. |
| First-aid measures after eye contact | : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| First-aid measures after ingestion | : Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. |

4.2. Most important symptoms/effects, acute and delayed

| | |
|---|--|
| Potential Adverse human health effects and symptoms | : No additional information available. |
|---|--|

4.3. Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

| | |
|--------------------------------|---|
| Suitable extinguishing media | : Use extinguishing media appropriate for surrounding fire. |
| Unsuitable extinguishing media | : In case of fire, all extinguishing media allowed. |

5.2. Specific hazards arising from the chemical

| | |
|----------------------------|--|
| Fire hazard | : Not flammable. |
| Reactivity in case of fire | : Fire conditions may produce small amounts of hexavalent chromium and other oxidation products. |

5.3. Special protective equipment and precautions for fire-fighters

| | |
|--------------------------------|---|
| Firefighting instructions | : Fight fire with normal precautions from a reasonable distance. |
| Protection during firefighting | : Do not enter fire area without proper protective equipment, including respiratory protection. |

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

| | |
|----------------------|---|
| Protective equipment | : Safety shoes. Gloves. Safety glasses. |
|----------------------|---|

For emergency responders

| | |
|----------------------|--|
| Protective equipment | : Equip cleanup crew with proper protection. |
|----------------------|--|

6.2. Methods and materials for containment and cleaning up

| | |
|---|--|
| For containment | : Collect spillage. |
| Methods for cleaning up | : On land, sweep or shovel into suitable containers. |
| For further information refer to section 8: "Exposure controls/personal protection" | |

SECTION 7 Handling and storage

7.1. Precautions for safe handling

| | |
|------------------|---|
| Hygiene measures | : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |
|------------------|---|

7.2. Conditions for safe storage, including incompatibilities

| | |
|-----------------------|-------------------------|
| Storage conditions | : Store in a dry place. |
| Incompatible products | : Strong acids. |

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Magnesium Oxide (1309-48-4)

USA - ACGIH - Occupational Exposure Limits

| | |
|-----------------|-------------------------|
| ACGIH® TLV® TWA | 10 mg/m³ inhalable dust |
|-----------------|-------------------------|

USA - OSHA - Occupational Exposure Limits

| | |
|--------------|--------------------------|
| OSHA PEL TWA | 10 mg/m³ respirable dust |
|--------------|--------------------------|

chromium(III) oxide (1308-38-9)

USA - ACGIH - Occupational Exposure Limits

| | |
|-----------------|----------------------------------|
| ACGIH® TLV® TWA | 0.003 mg/m³ (Inhalable fraction) |
|-----------------|----------------------------------|

iron(III) oxide (1309-37-1)

USA - ACGIH - Occupational Exposure Limits

| | |
|-----------------|-------------------------------|
| ACGIH® TLV® TWA | 5 mg/m³ (Respirable fraction) |
|-----------------|-------------------------------|

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aluminium oxide, non-fibrous (1344-28-1)

USA - ACGIH - Occupational Exposure Limits

ACGIH® TLV® TWA 1 mg/m³ respirable dust

8.2. Appropriate engineering controls

Appropriate engineering controls : Dust when sawing or tear out. Provide adequate ventilation to minimize dust concentrations.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Safety shoes. Wear suitable protective clothing

Respiratory protection:

Dust when sawing or tear out. Wear appropriate mask

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

| | |
|---|-----------------------|
| Physical state | : Solid |
| Appearance | : Shape. |
| Color | : Dark |
| Odor | : None |
| Odor threshold | : No data available |
| pH | : No data available |
| Melting point | : > 3000 °F |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Flammability (solid, gas) | : Not flammable. |
| Vapor pressure | : No data available |
| Relative vapor density at 20°C | : No data available |
| Relative density | : ≈ 3.3 |
| Solubility | : 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 |
| Explosion limits | : No data available |
| Particle characteristics | : No data available |

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

Fire conditions may produce small amounts of hexavalent chromium and other oxidation products.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

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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

| Magnesium Oxide (1309-48-4) | |
|-----------------------------|---|
| LD50 oral rat | > 5000 mg/kg (Rat, Literature study, Oral) |
| LD50 dermal rabbit | > 2000 mg/kg body weight (Rabbit, Literature study, Dermal) |

| chromium(III) oxide (1308-38-9) | |
|---------------------------------|--|
| LD50 oral rat | > 5000 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)) |
| LC50 Inhalation - Rat | > 5.41 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (dust), 14 day(s)) |

| iron(III) oxide (1309-37-1) | |
|-----------------------------|---|
| LD50 oral rat | > 10000 mg/kg body weight (Rat, Male, Experimental value, Oral) |
| LC50 Inhalation - Rat | 5.05 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s)) |

| aluminium oxide, non-fibrous (1344-28-1) | |
|--|--|
| LD50 oral rat | > 15900 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)) |
| LC50 Inhalation - Rat | > 2.3 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s)) |

Skin corrosion/irritation : Causes skin irritation.

| Magnesium Oxide (1309-48-4) | |
|-----------------------------|-----------|
| pH | 11 (10 %) |

| chromium(III) oxide (1308-38-9) | |
|---------------------------------|-------------------------------------|
| pH | No data available in the literature |

| iron(III) oxide (1309-37-1) | |
|-----------------------------|---------|
| pH | 7 (5 %) |

| aluminium oxide, non-fibrous (1344-28-1) | |
|--|-------------------------------------|
| pH | 9 – 10.5 (aqueous suspension, 33 %) |

Serious eye damage/irritation : Causes eye irritation.

| Magnesium Oxide (1309-48-4) | |
|-----------------------------|-----------|
| pH | 11 (10 %) |

| chromium(III) oxide (1308-38-9) | |
|---------------------------------|-------------------------------------|
| pH | No data available in the literature |

| iron(III) oxide (1309-37-1) | |
|-----------------------------|---------|
| pH | 7 (5 %) |

| aluminium oxide, non-fibrous (1344-28-1) | |
|--|-------------------------------------|
| pH | 9 – 10.5 (aqueous suspension, 33 %) |

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

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| | |
|------------------------|-------------------------------------|
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : May cause respiratory irritation. |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

| | |
|---|--|
| Magnesium Oxide (1309-48-4) | |
| Viscosity, kinematic | Not applicable (solid) |
| chromium(III) oxide (1308-38-9) | |
| Viscosity, kinematic | Not applicable (solid) |
| iron(III) oxide (1309-37-1) | |
| Viscosity, kinematic | Not applicable (solid) |
| aluminium oxide, non-fibrous (1344-28-1) | |
| Viscosity, kinematic | Not applicable (solid) |
| Potential Adverse human health effects and symptoms | : No additional information available. |

SECTION 12 Ecological information

12.1. Ecotoxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

| | |
|---|--|
| chromium(III) oxide (1308-38-9) | |
| LC50 - Fish [1] | > 10000 mg/l (ISO 7346-1, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP) |
| EC50 - Crustacea [1] | 14 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) |
| iron(III) oxide (1309-37-1) | |
| EC50 - Crustacea [1] | > 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) |
| aluminium oxide, non-fibrous (1344-28-1) | |
| LC50 - Fish [1] | > 100 mg/l (96 h, Salmo trutta, Literature study) |
| EC50 - Crustacea [1] | > 100 mg/l (48 h, Daphnia magna, Literature study) |

12.2. Persistence and degradability

Guidon X (Mixture)

| | |
|-------------------------------|--------------------|
| Persistence and degradability | Rapidly degradable |
|-------------------------------|--------------------|

| | |
|--|-----------------------------------|
| Magnesium Oxide (1309-48-4) | |
| Persistence and degradability | Not applicable. |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| chromium(III) oxide (1308-38-9) | |
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |
| ThOD | Not applicable (inorganic) |
| iron(III) oxide (1309-37-1) | |
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |

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| | |
|---|--|
| iron(III) oxide (1309-37-1) | |
| ThOD | Not applicable (inorganic) |
| aluminium oxide, non-fibrous (1344-28-1) | |
| Persistence and degradability | Not applicable. |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| 12.3. Bioaccumulative potential | |
| Magnesium Oxide (1309-48-4) | |
| Bioaccumulative potential | No bioaccumulation data available. |
| chromium(III) oxide (1308-38-9) | |
| Bioaccumulative potential | Not bioaccumulative. |
| iron(III) oxide (1309-37-1) | |
| Bioaccumulative potential | Not bioaccumulative. |
| aluminium oxide, non-fibrous (1344-28-1) | |
| Bioaccumulative potential | No data available. |
| 12.4. Mobility in soil | |
| Magnesium Oxide (1309-48-4) | |
| Surface tension | No data available in the literature |
| Ecology - soil | No data available. |
| chromium(III) oxide (1308-38-9) | |
| Surface tension | No data available in the literature |
| Ecology - soil | Adsorbs into the soil. |
| iron(III) oxide (1309-37-1) | |
| Surface tension | Not applicable (solid) |
| Ecology - soil | Adsorbs into the soil. |
| aluminium oxide, non-fibrous (1344-28-1) | |
| Surface tension | Not applicable (water solubility < 1 mg/l) |
| Ecology - soil | No data available. |
| 12.5. Other adverse effects | |
| Ozone | : Not classified |
| Fluorinated greenhouse gases | : No |

SECTION 13 Disposal considerations

Product/Packaging disposal recommendations : Chromite (Cr⁺³) may in normal use be converted chemically to a chromate (Cr⁺⁶). Hexavalent chromium (Cr⁺⁶) is considered a hazardous material.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA
Department of Transportation (DOT)
In accordance with DOT
Not regulated
Transportation of Dangerous Goods
Not regulated
Transport by sea
Not regulated
Air transport
Not regulated

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SECTION 15 Regulatory information

15.1. Federal regulations

| Guidon X (Mixture) | |
|--------------------|---|
| Note | This information must be included in all SDS's that are copied and distributed for this material. |

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

| chromium(III) oxide (1308-38-9) |
|---|
| Subject to reporting requirements of United States SARA Section 313 |

| aluminium oxide, non-fibrous (1344-28-1) | |
|---|--|
| Not subject to reporting requirements of the United States SARA Section 313 | |
| Note | Note: The section 313 chemical list contains "CAS # 1344-28-1 Aluminum Oxide (Fibrous forms)"; the Aluminum oxide contained in this product is non-fibrous, and thus is not a section 313 material. Only manufacturing, processing, or otherwise use of aluminum oxide in the fibrous form triggers reporting. |

15.2. International regulations

| CANADA | |
|---|--|
| Magnesium Oxide (1309-48-4) | |
| Listed on the Canadian DSL (Domestic Substances List) | |

| chromium(III) oxide (1308-38-9) |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| iron(III) oxide (1309-37-1) |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| aluminium oxide, non-fibrous (1344-28-1) |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

EU-Regulations
No additional information available
National regulations
No additional information available

15.3. State regulations

| Guidon X (Mixture) | |
|--|---|
| U.S. - California - Proposition 65 - Other information | This product contains chromite (Cr ³⁺) which may in normal use, be converted chemically to a chromate (Cr ⁶⁺) hexavalent chrome, a chemical known to the State of California to cause cancer. |

| Component | State or local regulations |
|---|---|
| Magnesium Oxide(1309-48-4) | 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 |
| chromium(III) oxide(1308-38-9) | U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List |
| iron(III) oxide(1309-37-1) | U.S. - New Jersey - Right to Know Hazardous Substance List |
| aluminium oxide, non-fibrous(1344-28-1) | 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

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)
Revision date : 1/30/2026
Issue date : 5/1/2015
Other information : Report language name. English. In the event of any conflict between English and other language versions, the English version shall prevail.

| Full text of hazard classes and H-statements | |
|--|----------------------------------|
| H315 | Causes skin irritation |
| H320 | Causes eye irritation |
| H335 | May cause respiratory irritation |

Safety Data Sheet (SDS), USA
This information and recommendations set forth herein are taken from sources believed to be accurate as of the date herein, however, RHI Magnesita makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.