

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 4/19/2023 Revision date: 4/19/2023 Supersedes: 10/28/2020

SECTION 1: Identification

1.1. Identification

Product form Mixture Product name Guidon X CAS-No. Mixture

Product code Brand Code 1780 Mix3800 Other means of identification Magnesia-Chrome Brick

1.2. Recommended use and restrictions on use

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

1.3. Supplier

Resco Products, Inc. One Robinson Plaza, Suite 300 6600 Steubenville Pike Pittsburgh, PA, 15205 **United States** 412-494-4491

SDS@RescoProducts.com - WWW.RescoProducts.com

1.4. Emergency telephone number

Emergency number : EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300

Outside USA & Canada +1 703-741-5970

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

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

Respiratory tract irritation

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

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. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

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	50 – 75	Not classified
chromium(III) oxide	CAS-No.: 1308-38-9	20 – 50	Not classified
iron(III) oxide	CAS-No.: 1309-37-1	10 – 20	Not classified
aluminium oxide, non-fibrous	CAS-No.: 1344-28-1	5 – 10	Not classified

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

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SECTION 4: First-aid measures

4.1. Description of 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 and effects (acute and delayed)

Potential Adverse human health effects and No additional information available.

symptoms

4.3. Immediate medical attention and special treatment, 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 : 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

6.1.1. For non-emergency personnel

Protective equipment : Safety shoes. Gloves. Safety glasses.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

For containment Collect spillage.

Methods for cleaning up On land, sweep or shovel into suitable containers

6.4. Reference to other sections

No additional information available

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 any incompatibilities

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Guidon X (Mixture)

No additional information available

Magnesium Oxide (1309-48-4)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA 10 mg/m3 inhalable dust

USA - OSHA - Occupational Exposure Limits

OSHA PEL (TWA) [1] 10 mg/m³ respirable dust

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chromium(III) oxide (1308-38-9)		
No additional information available		
iron(III) oxide (1309-37-1)	iron(III) oxide (1309-37-1)	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	5 mg/m³ (Respirable fraction)	
aluminium oxide, non-fibrous (1344-28-1)		
USA - ACGIH - Occupational Exposure Limits		

ACGIH OEL 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/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. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Shape.
Color : Dark
Odor : None
Odor threshold : No data available

рΗ No data available Melting point > 3000 °F Freezing point No data available Boiling point No data available Flash point No data available Relative evaporation rate (butyl acetate=1) 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

Insoluble in water. Solubility 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 No data available No data available Oxidizing properties

9.2. Other information

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.

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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

Magnesium Oxide (1309-48-4)

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

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, Exp value, Inhalation (aerosol), 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 Inhalation (aerosol), 14 day(s))			
Skin corrosion/irritation :	Skin corrosion/irritation : Causes skin irritation.		
Magnesium Oxide (1309-48-4)			

рН	11 (10 %)
chromium(III) oxide (1308-38-9)	
рН	No data available in the literature
iron(III) oxide (1309-37-1)	
рН	7 (5 %)
aluminium oxide, non-fibrous (1344-28-1)	

рН	9 – 10.5 (aqueous suspension, 33 %)
Serious eye damage/irritation :	Causes eye irritation.

conductory of damage, mindus.	. Gaaces eyea		
Magnesium Oxide (1309-48-4)			
Iwaonesium Oxide (1509-46-4)			

pH	11 (10 %)

chromium(iii) oxide (1308-38-9)		
	рН	No data available in the literature

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iron(III) oxide (1309-37-1)		
рН	7 (5 %)	
aluminium oxide, non-fibrous (1344-28-1)		
рН	9 – 10.5 (aqueous suspension, 33 %)	
Germ cell mutagenicity : Carcinogenicity : Reproductive toxicity : STOT-single exposure : STOT-repeated exposure : Aspiration hazard :	Not classified Not classified Not classified Not classified Not classified May cause respiratory irritation. Not classified Not classified Not classified Not classified 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. Toxicity		
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)	
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		
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 in soil: not applicable. 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.	

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iron(III) oxide (1309-37-1)	
Chemical oxygen demand (COD)	Not applicable (inorganic)
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	No data available in the literature
Ecology - soil	No data available.
12.5. Other adverse effects	

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

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

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Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US 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: 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. US State regulations

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
	Substance List, 0.5 Fermsylvania - KTK (Kight to Know) List

SECTION 16: Other information

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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 H-phrases	
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, Resco Products, Inc. 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.

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