

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : Larcobond AS
CAS-No. : Mixture
Product code : 7320

1.2. Other means of identification

Other means of identification : Basic Speciality

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Refractory
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.
Carcinogenicity, Category 1A	H350	May cause cancer (Inhalation).
Full text of H statements : see section 16		

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger
Hazard statements (GHS US) : H315 - Causes skin irritation
H350 - May cause cancer (Inhalation).
Causes eye irritation
Precautionary statements (GHS US) : P280 - Wear Dust respirator, eye protection, protective gloves.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 - If skin irritation occurs: Get medical advice or attention.
P337+P313 - If eye irritation persists: Get medical advice or attention.

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
Transvaal Chrome Ore	CAS-No.: 1308-31-2	30 – 60	Not classified
magnesium sulphate	CAS-No.: 7487-88-9	1 – 5	Not classified

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Name	Product identifier	%	GHS US classification
quartz	CAS-No.: 14808-60-7	0.5 – 1	Carc. 1A, H350

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. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Gently wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.
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. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms/effects, acute and delayed

Potential Adverse human health effects and symptoms	: Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/effects after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.
Symptoms/effects after skin contact	: Causes skin irritation.

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	: No unsuitable extinguishing media known.

5.2. Specific hazards arising from the chemical

Fire hazard	: Not flammable.
Hazardous decomposition products 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. Prevent fire-fighting water from entering environment.
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

No additional information available

For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
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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.

See Heading 8, Exposure controls and personal protection

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid contact with eyes. Avoid contact with skin. Do not breathe dust.
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 this product in a dry location where it can be protected from the elements.
Incompatible products	: Strong bases. 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/m ³ inhalable dust
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Magnesium Oxide (1309-48-4)	
USA - OSHA - Occupational Exposure Limits	
OSHA PEL TWA	10 mg/m ³ respirable dust
Transvaal Chrome Ore (1308-31-2)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® TWA	0.05 mg/m ³ inhalable dust
quartz (14808-60-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® TWA	0.025 mg/m ³ (Silica-Crystalline Quartz; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)
USA - OSHA - Occupational Exposure Limits	
Local name	Silica, crystalline quartz, respirable dust
OSHA PEL TWA	0.05 mg/m ³ respirable dust
Remark (OSHA)	(3) See Table Z-3.

8.2. Appropriate engineering controls

Appropriate engineering controls : 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:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Other information:

Do not eat, drink or smoke during use.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular Mixture.
Color	: Dark
Odor	: odorless
Odor threshold	: No data available
pH	: No data available
Melting point	: > 2500 °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	: No data available
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.

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10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

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

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)

magnesium sulphate (7487-88-9)

LD50 oral rat	> 2000 mg/kg body weight (OECD 425: Acute Oral Toxicity: Up-and-Down Procedure, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Read-across, Dermal, 14 day(s))

Skin corrosion/irritation : Causes skin irritation.

Magnesium Oxide (1309-48-4)

pH	11 (10 %)
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magnesium sulphate (7487-88-9)

pH	7 (5 %)
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quartz (14808-60-7)

pH	6 – 7
Serious eye damage/irritation	: Causes eye irritation.

Magnesium Oxide (1309-48-4)

pH	11 (10 %)
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magnesium sulphate (7487-88-9)

pH	7 (5 %)
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quartz (14808-60-7)

pH	6 – 7
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer (Inhalation).

quartz (14808-60-7)

IARC group	1 - Carcinogenic to humans
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Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

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Magnesium Oxide (1309-48-4)	
Viscosity, kinematic	Not applicable (solid)
magnesium sulphate (7487-88-9)	
Viscosity, kinematic	Not applicable (solid)
Potential Adverse human health effects and symptoms	: Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/effects after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.
Symptoms/effects after skin contact	: Causes skin irritation.
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
magnesium sulphate (7487-88-9)	
LC50 - Fish [1]	680 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Read-across, Lethal)
EC50 - Crustacea [1]	1700 mg/l (24 h, Daphnia magna)
LC50 - Fish [2]	15500 mg/l (96 h, Gambusia affinis, Static system)
12.2. Persistence and degradability	
Larcobond AS (Mixture)	
Persistence and degradability	Not established.
Magnesium Oxide (1309-48-4)	
Persistence and degradability	Not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
magnesium sulphate (7487-88-9)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
Transvaal Chrome Ore (1308-31-2)	
Persistence and degradability	Not established.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
quartz (14808-60-7)	
Persistence and degradability	Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
12.3. Bioaccumulative potential	
Larcobond AS (Mixture)	
Bioaccumulative potential	Not established.

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Magnesium Oxide (1309-48-4)				
Bioaccumulative potential	No bioaccumulation data available.			
magnesium sulphate (7487-88-9)				
Bioaccumulative potential	Not bioaccumulative.			
Transvaal Chrome Ore (1308-31-2)				
Bioaccumulative potential	No data available.			
quartz (14808-60-7)				
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.			
magnesium sulphate (7487-88-9)				
Surface tension	No data available in the literature			
Ecology - soil	No (test) data on mobility of the substance available.			
Transvaal Chrome Ore (1308-31-2)				
Ecology - soil	No data available.			
12.5. Other adverse effects				
Ozone	: Not classified			
Effect on the global warming	: None known			
Fluorinated greenhouse gases	: No			
Other information	: Avoid release to the environment.			
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				
SECTION 15 Regulatory information				
15.1. Federal regulations				
Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):				
Name	CAS-No.	Listing	Commercial status	Flags
Magnesium Oxide	1309-48-4	Present	Active	
magnesium sulphate	7487-88-9	Not present	-	
Transvaal Chrome Ore	1308-31-2	Not present	-	
quartz	14808-60-7	Present	Active	
15.2. International regulations				
CANADA				
Magnesium Oxide (1309-48-4)				
Listed on the Canadian DSL (Domestic Substances List)				

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Transvaal Chrome Ore (1308-31-2)
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

quartz (14808-60-7)
Listed on IARC (International Agency for Research on Cancer)

15.3. State regulations

Larcobond AS (Mixture)	
U.S. - California - Proposition 65 - Other information	This product contains crystalline silica, a chemical known to the state of California to cause cancer. 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 For more information go to WWW.P65Warnings.ca.gov

Transvaal Chrome Ore (1308-31-2)	
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.

quartz (14808-60-7)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

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
Transvaal Chrome Ore(1308-31-2)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List
quartz(14808-60-7)	U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS 2024)

Revision date : 2/18/2026
Issue date : 6/11/2015
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
H350	May cause cancer.

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.