



DOL-Mix-R+

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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SECTION 1: Identification

1.1. Identification

Product form : Mixtures
Product name : DOL-Mix-R+
CAS No : Mixture
Product code : 5037
Other means of identification : Dolomite Speciality

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Refractory

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 H314 Causes severe skin burns and eye damage
Category 1A
Carcinogenicity Category H350 May cause cancer (Inhalation)
1A

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) : Danger
Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage
H350 - May cause cancer (Inhalation)
Precautionary statements (GHS-US) : P202 - Do not handle until all safety precautions have been read and understood
P280 - Wear eye protection, protective gloves, protective clothing
P223 - Do not allow contact with water
Avoid contact with the skin and the eyes
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
IF ON SKIN: Gently wash with plenty of soap and water
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P260 - Do not breathe dust

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification : May release smoke when heated. Combustion products include carbon monoxide, carbon dioxide, and hydrocarbon vapors.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
calcium oxide	(CAS No) 1305-78-8	50 - 75	Skin Corr. 1A, H314
Magnesium Oxide	(CAS No) 1309-48-4	20 - 50	Not classified
Oil		1 - 5	Not classified
crystalite	(CAS No) 14464-46-1	0.1 - 0.5	Carc. 1A, H350
quartz	(CAS No) 14808-60-7	0.1 - 0.5	Carc. 1A, H350

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

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 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. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do NOT induce vomiting. Rinse mouth.

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

Symptoms/injuries after skin contact	: May cause moderate irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.

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	: Carbon dioxide. Dry powder. Dry sand.
Unsuitable extinguishing media	: Do not use extinguishing media containing water.

5.2. Specific hazards arising from the chemical

Fire hazard	: Reactions involving a fire hazard: see "Reactivity Hazard". Do not breathe fumes from fires or vapors from decomposition.
Reactivity	: Reacts exothermically with water (moisture). Reacts with water to form Ca(OH) ₂ , Mg(OH) ₂ , and heat. Reacts with acids to form calcium salts while generating heat.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: When cooling/extinguishing: no water in the substance.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Protective gloves. Safety glasses. Safety shoes. Protective clothing.
Emergency procedures	: Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment.
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6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

For containment	: On land, sweep or shovel into suitable containers.
Methods for cleaning up	: Collect spillage.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid contact with eyes. Contact lenses should be removed.
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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store this product in a dry location where it can be protected from the elements. Protect from moisture.
Incompatible products	: Acids; reactive fluoridated, brominated, or phosphorous compounds; aluminum (may form hydrogen gas); reactive metals; organic acid anhydrides; nitro-organic compounds; interhalogenated compounds.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Magnesium Oxide (1309-48-4)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (Magnesium oxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction)
calcium oxide (1305-78-8)		
ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (Calcium oxide; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
cristobalite (14464-46-1)		
ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ respirable dust
OSHA	OSHA PEL (TWA) (mg/m ³)	0.05 mg/m ³ respirable dust
Oil		
Not applicable		

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quartz (14808-60-7)		
ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ (Silica-Crystalline Quartz; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)
OSHA	OSHA PEL (TWA) (mg/m ³)	0.05 mg/m ³ Respirable fraction

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granular Mixture.
Color	: brown
Odor	: Slight Petroleum Odor
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
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 2.8 - 3
Solubility	: Reacts with water to form Ca(OH) ₂ , Mg(OH) ₂ , and heat.
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
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts exothermically with water (moisture). Reacts with water to form Ca(OH)₂, Mg(OH)₂, and heat. Reacts with acids to form calcium salts while generating heat.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Water, humidity.

10.5. Incompatible materials

Acids.

10.6. Hazardous decomposition products

Thermal decomposition generates : Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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

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calcium oxide (1305-78-8)	
LD50 oral rat	> 2000 mg/kg body weight (Rat; OECD 425: Acute Oral Toxicity: Up-and-Down Procedure; Experimental value)
LD50 dermal rabbit	> 2500 mg/kg body weight (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity)
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer (Inhalation).

crystalite (14464-46-1)	
IARC group	1 - Carcinogenic to humans

quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans

Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after skin contact	: May cause moderate irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Magnesium Oxide (1309-48-4)	
EC50 Daphnia 1	500-665,TLM; 96 h; Mysidacea

calcium oxide (1305-78-8)	
EC50 Daphnia 2	49.1 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Read-across)
Threshold limit algae 1	184.57 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Read-across)

12.2. Persistence and degradability

Magnesium Oxide (1309-48-4)	
Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the substance available.
ThOD	Not applicable (inorganic)

calcium oxide (1305-78-8)	
Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

crystalite (14464-46-1)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

quartz (14808-60-7)	
Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

Magnesium Oxide (1309-48-4)	
Bioaccumulative potential	Bioaccumulation: not applicable.

calcium oxide (1305-78-8)	
Bioaccumulative potential	Not bioaccumulative.

crystalite (14464-46-1)	
Bioaccumulative potential	No bioaccumulation data available.

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quartz (14808-60-7)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the global warming : No known effects from this product.
GWPmix comment : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Disposal methods
No additional information available

SECTION 14: Transport information

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. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

No additional information available

calcium oxide (1305-78-8)
Listed on the Canadian DSL (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. US State regulations

DOL-Mix-R+ (Mixture)	
U.S. - California - Proposition 65 - Other information	This product contains crystalline silica, a chemical known to the state of California to cause cancer.

crystalite (14464-46-1)				
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)
Yes	No	No	No	

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)
Yes	No	No	No	

Magnesium Oxide (1309-48-4)	
U.S. - New Jersey - Right to Know Hazardous Substance List	

calcium oxide (1305-78-8)	
U.S. - New Jersey - Right to Know Hazardous Substance List	

crystalite (14464-46-1)	
U.S. - New Jersey - Right to Know Hazardous Substance List	

quartz (14808-60-7)	
U.S. - New Jersey - Right to Know Hazardous Substance List	

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SECTION 16: Other information

Revision date : 01/31/2017
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:

H314	Causes severe skin burns and eye damage
H350	May cause cancer

SDS US (GHS HazCom 2012)

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