

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 6/17/2015 Revision date: 3/31/2025 Supersedes: 4/26/2022

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : Super Grout 85 Winter

CAS-No. : Mixture

Product code : 3316 = Mix3086

Other means of identification : Alumina-Silicate Wet Air Set Mortar-Slurry

1.2. Recommended use and restrictions on use

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

1.3. Supplier

RHI Magnesita

T 412-494-4491

One Robinson Plaza, Suite 300

6600 Steubenville Pike Pittsburgh, PA, 15205 United States

Resco_SDS.TDS@rhimagnesita.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 H315 Causes skin irritation Serious eye damage/eye irritation Category 2B H320 Causes eye irritation

Carcinogenicity Category 1A H350 May cause cancer (After drying or heating, Inhalation)

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)

Hazard statements (GHS US) : H315 - Causes skin irritation

H319 - Causes serious eye irritation

H350 - May cause cancer (After drying or heating, 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.

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/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Ethylene glycol is toxic to humans. Harmful if swallowed. May cause damage to organs (kidneys)

through prolonged or repeated exposure.

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
aluminium oxide, non-fibrous	CAS-No.: 1344-28-1	50 – 75	Not classified
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤55%, aqueous solutions	CAS-No.: 1344-09-8	10 – 20	Skin Irrit. 2, H315
			Eye Irrit. 2B, H320
quartz	CAS-No.: 14808-60-7	1 – 5	Carc. 1A, H350

Safety Data Sheet

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

Name	Product identifier	%	GHS US classification
ethylene glycol	CAS-No.: 107-21-1	1 – 5	Not classified
cristobalite	CAS-No.: 14464-46-1	0.1 – 0.5	Carc. 1A, H350

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 : 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 and effects (acute and delayed)

Potential Adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met.

: After drying or heating. Danger of serious damage to health by prolonged exposure through

inhalation. May cause cancer by inhalation.

Symptoms/effects after skin contact : Causes skin irritation.
Symptoms/effects after eye contact : Causes serious eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

Symptoms/effects after inhalation

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.

Explosion hazard : Prolonged exposure to fire may cause containers to rupture/explode.

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

6.1.1. For non-emergency personnel

Emergency procedures : If spilled, may cause the floor to be slippery.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Stop release.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Plug the leak, cut off the supply.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage.

6.4. Reference to other sections

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.

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 original container. Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

3/31/2025 (Revision date) EN (English US) 2/8

Safety Data Sheet

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

SECTION 8: Exposure controls/personal protection					
8.1. Control parameters					
aluminium oxide, non-fibrous (1344-28-1)					
USA - ACGIH - Occupational Exposure Limits					
ACGIH OEL TWA	1 mg/m³ respirable dust				
cristobalite (14464-46-1)					
USA - ACGIH - Occupational Exposure Limits					
ACGIH OEL TWA	0.025 mg/m³ respirable dust				
USA - OSHA - Occupational Exposure Limits					
OSHA PEL TWA	0.05 mg/m³ respirable dust				
ethylene glycol (107-21-1)					
USA - ACGIH - Occupational Exposure Limits					
ACGIH OEL TWA	25 ppm (Vapor fraction)				
ACGIH OEL STEL	10 mg/m³ (Inhalable fraction, Aerosol only)				
	50 ppm (Vapor fraction)				
quartz (14808-60-7)	quartz (14808-60-7)				
USA - ACGIH - Occupational Exposure Limits					
ACGIH OEL TWA	0.025 mg/m³ (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/m³ respirable dust				
Remark (OSHA)	(3) See Table Z-3.				
8.2. Appropriate engineering controls					

adequate ventilation to minimize dust concentrations.

Emergency eye wash fountain with clean water. After drying or heating. Dust on tear out. Provide

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Appropriate engineering controls

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:

After air drying or heating. Dust when sawing or tear out. Wear appropriate mask

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Appearance : Slurry. Color : brown Odor : earthy

Odor threshold : No data available pH > 10

Melting point : > 2500 °F
Freezing point : ≈ 20 °F
Poiling point : No data or

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 : ≈ 2.4

Solubility : Moderately soluble in water.

3/31/2025 (Revision date) EN (English US) 3/8

Safety Data Sheet

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

Partition coefficient n-octanol/water (Log Pow) No data available Auto-ignition temperature No data available Decomposition temperature No data available Viscosity, kinematic Not Applicable 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

Air Setting.

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

sodium silicate, alkaline 1.6/2.6, 35%≤conc≤55%, aqueous solutions (1344-09-8)					
LD50 oral rat > 2000 mg/kg (Rat, Oral)					
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 valinhalation (aerosol), 14 day(s))					
ethylene glycol (107-21-1)					
LD50 oral rat	7712 mg/kg body weight (according to BASF-internal standards, Rat, Male / female, Experimental value, Aqueous solution, Oral, 7 day(s))				
LD50 dermal	> 3500 mg/kg body weight (Mouse, Male / female, Experimental value, Dermal)				
LC50 Inhalation - Rat	> 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))				
ATE US (oral) 7712 mg/kg body weight					
Skin corrosion/irritation	· Causes skin irritation				

Skin corrosion/irritation : Causes skin irritation.

pH: > 10

sodium silicate, alkaline 1.6/2.6, 35%≤conc≤55%, aqueous solutions (1344-09-8)			
pH 11 – 13			
aluminium oxide, non-fibrous (1344-28-1)			
pH 9 – 10.5 (aqueous suspension, 33 %)			
cristobalite (14464-46-1)			
pH 6-7			

Safety Data Sheet

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

ethylene glycol (107-21-1)	
рН	No data available in the literature
quartz (14808-60-7)	
рН	6 – 7
Serious eye damage/irritation :	Causes eye irritation. pH: > 10
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤5	5%, aqueous solutions (1344-09-8)
рН	11 – 13
aluminium oxide, non-fibrous (1344-28-1)	
рН	9 – 10.5 (aqueous suspension, 33 %)
cristobalite (14464-46-1)	
рН	6-7
ethylene glycol (107-21-1)	
рН	No data available in the literature
quartz (14808-60-7)	
pH	6 – 7
Respiratory or skin sensitization : Germ cell mutagenicity : Carcinogenicity :	Not classified Not classified May cause cancer (After drying or heating, Inhalation).
quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
Reproductive toxicity : STOT-single exposure : STOT-repeated exposure : Aspiration hazard : Viscosity, kinematic : :	Not classified Not classified Not classified Not classified Not classified Not Applicable
aluminium oxide, non-fibrous (1344-28-1)	
Viscosity, kinematic	Not applicable (solid)
ethylene glycol (107-21-1)	
Viscosity, kinematic	18.86 mm²/s (20 °C)
Potential Adverse human health effects and symptoms Symptoms/effects after inhalation : Symptoms/effects after skin contact : Symptoms/effects after eye contact :	Based on available data, the classification criteria are not met. After drying or heating. Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation. Causes skin irritation. Causes serious eye irritation.
SECTION 12: Ecological information	
12.1. Toxicity	
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤5	
LC50 - Fish [1]	210 mg/l (96 h, Brachydanio rerio, Pure substance)
EC50 - Crustacea [1]	216 mg/l (96 h, Daphnia magna, Pure substance)
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)

Safety Data Sheet

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

ethylene glycol (107-21-1)	
LC50 - Fish [1]	> 72860 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, Daphnia magna, Static system, Fresh water, Experimental value)
12.2. Persistence and degradability	
Super Grout 85 Winter (Mixture)	
Persistence and degradability	Not established.
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤5	5%, aqueous solutions (1344-09-8)
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
aluminium oxide, non-fibrous (1344-28-1)	
Persistence and degradability	Not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
cristobalite (14464-46-1)	
Persistence and degradability	Mineral, Not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
ethylene glycol (107-21-1)	
Persistence and degradability	Readily biodegradable in the soil, Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.47 g O ₂ /g substance
Chemical oxygen demand (COD)	1.24 g O ₂ /g substance
ThOD	1.29 g O ₂ /g substance
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	
Super Grout 85 Winter (Mixture)	
Bioaccumulative potential	Not established.
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤5	5%, aqueous solutions (1344-09-8)
Bioaccumulative potential	No bioaccumulation data available.
aluminium oxide, non-fibrous (1344-28-1)	
Bioaccumulative potential	No data available.
cristobalite (14464-46-1)	
Bioaccumulative potential	No data available.

Safety Data Sheet

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

ethylene glycol (107-21-1)				
Partition coefficient n-octanol/water (Log Pow)	-1.36 (Experimental value)			
Bioaccumulative potential	Not bioaccumulative.			
quartz (14808-60-7)				
Bioaccumulative potential	No data available.			
12.4. Mobility in soil				
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤55%, aqueous solutions (1344-09-8)				
Ecology - soil	No data available.			
aluminium oxide, non-fibrous (1344-28-1)				
Surface tension	No data available in the literature			
Ecology - soil	No data available.			
cristobalite (14464-46-1)				
Ecology - soil	No data available.			
ethylene glycol (107-21-1)				
Surface tension	48.4 mN/m (20 °C)			
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v2.0, QSAR)			
Ecology - soil	Highly mobile in soil.			
12.5. Other adverse effects				
	None known Avoid release to the environment.			
SECTION 13: Disposal considerations				

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

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. 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

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 Alum				
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.				

ethylene glycol (107-21-1)	
Subject to reporting requirements of United States SAR	A Section 313
CERCLA RQ	5000 lb
Note	This information must be included in all SDS's that are copied and distributed for this material.

Safety Data Sheet

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

15.2. International regulations

CANADA

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

Listed on the Canadian DSL (Domestic Substances List)

cristobalite (14464-46-1)

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

Super Grout 85 Winter (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 ethylene glycol a chemical known to the State of California to cause birth defects or other reproductive harm. For more information go to WWW.P65Warnings.ca.gov

cristobalite (14464-46-1)					
U.S California -	U.S California -	U.S California -	l .	No significant risk	Maximum allowable
Proposition 65 -	Proposition 65 -	Proposition 65 -	Proposition 65 -	level (NSRL)	dose level (MADL)
Carcinogens List	Developmental Toxicity	-1	Reproductive Toxicity		
		- Female	- Male		
Yes	No	No	No		

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

Component	State or local regulations
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
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
ethylene glycol (107-21-1)	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
Quartz (14808-60-7)	U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

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

Revision date : 3/31/2025

Other information : Report language name. English. In the event of any conflict between English and other language

versions, the English version shall prevail.

versions, the English version shall prevail.		
Full text of haz	ard 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, 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.

3/31/2025 (Revision date) EN (English US) 8/8