

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 3/15/2015 Revision date: 5/29/2024 Supersedes: 4/13/2021

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : ProGun 28 LI
CAS-No. : Mixture
Product code : 1044

Other means of identification : Alumina-Silicate Cement Bonded Castable

1.2. Recommended use and restrictions on use

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

1.3. Supplier

Resco Products, Inc.
One Robinson Plaza, Suite 300
6600 Steubenville Pike
Pittsburgh, PA, 15205
United States
T 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

Serious eye damage/eye irritation Category 2B

Carcinogenicity Category 1A

H315

Causes skin irritation

Causes eye irritation

Causes eye irritation

May cause cancer (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) : Danger

Hazard statements (GHS US)

: H315 - Causes skin irritation
H320 - Causes eye irritation

H350 - May cause cancer (Inhalation)

Precautionary statements (GHS US) : P280 - Wear eye protection, Dust respirator, 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/attention. P337+P313 - If eye irritation persists: Get medical advice/attention.

P260 - Do not breathe dust.

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
Calcium Aluminate Cement	CAS-No.: 65997-16-2		Skin Irrit. 2, H315
			Eye Irrit. 2B, H320
cristobalite	CAS-No.: 14464-46-1	10 – 20	Carc. 1A, H350
quartz	CAS-No.: 14808-60-7	0.5 – 1	Carc. 1A, H350

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. 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.

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 : Danger of serious damage to health by prolonged exposure through inhalation. May cause

symptoms cancer by inhalation.

Symptoms/effects after inhalation : May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure

through inhalation.
: Causes skin irritation.
: Causes eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

Symptoms/effects after skin contact

Symptoms/effects after eye contact

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.

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

Emergency procedures : Do not breathe dust. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area. On land, sweep or shovel into suitable containers.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust.

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 : Do not handle until all safety precautions have been read and understood. Avoid raising dust.

Avoid contact with skin and eyes. 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 any 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

ProGun 28 LI (Mixture)

No additional information available

Calcium Aluminate Cement (65997-16-2)

No additional information available

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cristobalite (14464-46-1)	
USA - ACGIH - Occupational Exposure L	
ACGIH OEL TWA	0.025 mg/m³ respirable dust
USA - OSHA - Occupational Exposure Li	mits
OSHA PEL (TWA) [1]	0.05 mg/m³ respirable dust
quartz (14808-60-7)	
USA - ACGIH - Occupational Exposure L	İmits
ACGIH OEL TWA 0.025 mg/m³ (Silica-Crystalline Quartz; USA; Time-weighted average exposure limit 8 h; TL	
	Adopted Value; Respirable fraction)
USA - OSHA - Occupational Exposure Li	mits
Local name	Silica, crystalline quartz, respirable dust
OSHA PEL (TWA) [1]	0.05 mg/m³ respirable dust
Remark (OSHA)	(3) See Table Z-3.
8.2. Appropriate engineering control	s

: Provide adequate ventilation to minimize dust concentrations. Appropriate engineering controls

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:

Wear suitable protective clothing

Respiratory protection:

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 Solid

Appearance Granular mixture. Color Light gray Odor earthy

Odor threshold No data available

≈ 10.5 pH solution concentration 10 % > 1100 °C Melting point 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 No data available Solubility Slightly soluble. 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

9.2. Other information

Oxidizing properties

No additional information available

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No data available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Hydraulic setting.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Avoid dust formation.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

No additional information available

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
Skin corrosion/irritation : Causes skin irritation.

pH: ≈ 10.5

Calcium Aluminate Cement (65997-16-2)		
рН	≤ 13	
cristobalite (14464-46-1)		
рН	6 – 7	
quartz (14808-60-7)		
pH 6 – 7		

Serious eye damage/irritation : Causes eye irritation.

pH: ≈ 10.5

Calcium Aluminate Cement (65997-16-2)	
рН	≤ 13
cristobalite (14464-46-1)	
5H	6 7

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

Reproductive toxicity : Not classified

STOT-single exposure : Not classified STOT-repeated exposure : Not classified Aspiration hazard : Not classified Viscosity, kinematic : Not Applicable

Potential Adverse human health effects and symptoms : Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.

Symptoms/effects after inhalation : May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure through inhalation.

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

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SECTION 12: Ecological information					
12.1. Toxicity					
No additional information available					
12.2. Persistence and degradability					
ProGun 28 LI (Mixture)					
Persistence and degradability	Not established.				
cristobalite (14464-46-1)					
Persistence and degradability	Mineral. Not applicable.				
Chemical oxygen demand (COD)	Not applicable				
ThOD	Not applicable				
BOD (% of 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					
ProGun 28 LI (Mixture)					
Bioaccumulative potential	Not established.				
cristobalite (14464-46-1)					
Bioaccumulative potential	No data available.				
quartz (14808-60-7)					
Bioaccumulative potential	No data available.				
12.4. Mobility in soil					
cristobalite (14464-46-1)					
Ecology - soil	No data available.				

Ecology - soil No data available

12.5. Other adverse effects

Effect on the global warming : None known

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Ecology - waste materials : Avoid release to the environment.

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. 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

15.2. International regulations

CANADA

Calcium Aluminate Cement (65997-16-2)

Listed on the Canadian DSL (Domestic Substances List)

cristobalite (14464-46-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Yes

No additional information available

National regulations

quartz (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

No

15.3. US State regulations

ProGun 28 LI (Mixture)

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

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

No

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

Component	State or local regulations
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
Quartz (14808-60-7)	U.S New Jersey - Right to Know Hazardous Substance 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-phra	Full text of H-phrases		
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, 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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