

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 Product name CAS-No. Product code Other means of identification	 Mixture ProGun 30 Mixture 1045 Alumina-Silicate 	e Cement Bondec	Castable		
1.2. Recommended use and restrictions on	use				
Use of the substance/mixture Recommended use	: Refractory : 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 <u>SDS@RescoProducts.com</u> - <u>WWW.RescoProducts.co</u>	:om				
1.4. Emergency telephone number					
Emergency number	: EMERGENCY			Canada 1-800-	424-9300
SECTION 2: Hazard(s) identification	Outside USA &	Canada +1 703-7	41-5970		
2.1. Classification of the substance or mixtu GHS US classification	lie				
Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2B Carcinogenicity Category 1A Full text of H statements : see section 16		H320 C	Causes skir Causes eye Aay cause		on)
2.2. GHS Label elements, including precauti	ionary statemen	nts			
GHS US labeling Hazard pictograms (GHS US)					
Signal word (GHS US) Hazard statements (GHS US) Precautionary statements (GHS US)	 Danger H315 - Causes skin irritation H320 - Causes eye irritation H350 - May cause cancer (Inhalation) 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 cla	assification				
No additional information available					
2.4. Unknown acute toxicity (GHS US)					
No additional information available					
SECTION 3: Composition/Information o	n ingredients				
3.1. Substances					
Not applicable					
3.2. Mixtures					
Name		Product ic	lentifier	%	GHS US classification
aluminium oxide, non-fibrous		CAS-No.: 13		10 – 20	Not classified
cristobalite		CAS-No.: 14		5 – 10	Carc. 1A, H350
Calcium Aluminate Cement		CAS-No.: 65			Skin Irrit. 2, H315 Eye Irrit. 2B, H320
quartz		CAS-No.: 14	4808-60-7	5 – 10	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	: 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. : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present
First-aid measures after eye contact	and easy to do. Continue rinsing.
First-aid measures after ingestion 4.2. Most important symptoms and effects	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
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
Symptoms/effects after skin contact	through inhalation. : Causes skin irritation.
Symptoms/effects after eye contact	: Causes eye irritation.
4.3. Immediate medical attention and spec	cial treatment, if necessary
No additional information available	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishing	ng media
Suitable extinguishing media Unsuitable extinguishing media	 Use extinguishing media appropriate for surrounding fire. In case of fire, all extinguishing media allowed.
5.2. Specific hazards arising from the che	mical
Fire hazard	: Not flammable.
5.3. Special protective equipment and pre	cautions for fire-fighters
Firefighting instructions	: Fight fire with normal precautions from a reasonable distance. Prevent fire-fighting water from
Protection during firefighting	entering environment. : Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release measu	ures
6.1. Personal precautions, protective equi	ipment 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 containmen	t 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 pr	rotection.
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 Incompatible products	 Store this product in a dry location where it can be protected from the elements. Strong bases. Strong acids.
SECTION 8: Exposure controls/perso	
8.1. Control parameters	
ProGun 30 (Mixture)	
No additional information available	

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Calcium Aluminate Cement (65997-16-2)	
No additional information available	
cristobalite (14464-46-1)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.025 mg/m ³ respirable dust
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	0.05 mg/m ³ respirable dust
aluminium oxide, non-fibrous (1344-28-1)	
USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA	1 ma/m ³ reconirchia duct
	1 mg/m ³ respirable dust
quartz (14808-60-7) USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL 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) [1]	0.05 mg/m ³ respirable dust
Remark (OSHA)	(3) See Table Z-3.
8.2. Appropriate engineering controls	
	Provide adequate ventilation to minimize dust concentrations.
8.3. Individual protection measures/Personal	
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 prop	erties
9.1. Information on basic physical and chemi	cal properties
	Solid
••	Granular mixture.
Color : Odor :	Gray
Odor threshold	earthy No data available
pH :	≈ 10.5
pH solution concentration :	10 %
Melting point :	> 2000 °F
Freezing point :	No data available
Boiling point :	No data available
Flash point : Relative evaporation rate (butyl acetate=1) :	No data available No data available
	Not flammable.
Vapor pressure :	No data available
Relative vapor density at 20°C : Relative density :	No data available 2 – 3
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 : Viscosity, dynamic :	Not Applicable No data available
Explosion limits	No data available
Explosive properties :	No data available

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Oxidizing properties :	No data available
9.2. Other information	
No additional information available	
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 (dermal) :	Not classified Not classified Not classified
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 value, Inhalation (aerosol), 14 day(s))
Skin corrosion/irritation :	Causes skin irritation.
	pH: ≈ 10.5
Calcium Aluminate Cement (65997-16-2)	
рН	≤ 13
cristobalite (14464-46-1)	
рН	6 – 7
aluminium oxide, non-fibrous (1344-28-1)	
рН	9 – 10.5 (aqueous suspension, 33 %)
quartz (14808-60-7)	
рН	6 - 7
Serious eye damage/irritation :	Causes eye irritation. pH: ≈ 10.5
Calcium Aluminate Cement (65997-16-2)	
рН	≤ 13
cristobalite (14464-46-1)	
рН	6 - 7
aluminium oxide, non-fibrous (1344-28-1)	
рН	9 – 10.5 (aqueous suspension, 33 %)
quartz (14808-60-7)	
рН	6 - 7
Respiratory or skin sensitization :	Not classified

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Germ cell mutagenicity Carcinogenicity	: Not classified : May cause cancer (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
aluminium oxide, non-fibrous (1344-28-1)	
Viscosity, kinematic	Not applicable (solid)
symptoms Symptoms/effects after inhalation Symptoms/effects after skin contact	 Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation. May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure through inhalation. Causes skin irritation. Causes eye irritation.
SECTION 12: Ecological information	
12.1. Toxicity	
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	
ProGun 30 (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
aluminium oxide, non-fibrous (1344-28-1)	
Persistence and degradability	Not applicable.
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	
ProGun 30 (Mixture)	
Bioaccumulative potential	Not established.
cristobalite (14464-46-1)	
Bioaccumulative potential	No data available.
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aluminium oxide, non-fibrous (1344-28-1)	
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.
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	
Effect on the global warming	: None known
SECTION 13: Disposal considerations	
13.1. Disposal methods	
Product/Packaging disposal recommendations Ecology - waste materials	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.
SECTION 14: Transport information	
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 (TSCA) inventory	as Active on the United States Environmental Protection Agency Toxic Substances Control Act
aluminium oxide, non-fibrous (1344-28-1)	
Aluminum	States SARA Section 313 e section 313 chemical list contains "CAS # 1344-28-1 Aluminum Oxide (Fibrous forms)"; the n oxide contained in this product is non-fibrous, and thus is not a section 313 material. Only uring, processing, or otherwise use of aluminum oxide in the fibrous form triggers reporting.
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)
aluminium oxide, non-fibrous (1344-28-1) 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 of	n Cancer)

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ProGun 30 (Mixture)					
		This product contains (prietallino silica, a chomi	cal known to the state	of California to causo
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			
				Trainingo.oa.gov	
cristobalite (14464-4	6-1)				
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 - Female	Reproductive Toxicity - Male		
Yes	No	No	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 - Female	Reproductive Toxicity - 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			
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			
Quartz (14808-60-7) U.S New Jersey - R			ght to Know Hazardous	Substance List	
SECTION 16: Othe	r information				
	ister / Vol. 77, No. 58 / Monda		s and Regulations		
Revision date	:	5/29/2024			
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		teresione, and Englion ve	nelet brian provan		

	versions, the English version shall prevail.		
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.