

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 10/23/2018 Revision date: 10/23/2018 Supersedes: 05/15/2018

ECTION 1: Identification				
FIGULCI IOTO		Mixture		
		Mixture Researcest 34 Rapol Mix Castak		
Product name CAS-No.	:	Rescocast 3A Panel Mix Castal Mixture	iie	
Product code		0324		
Other means of identification		Alumina-Silicate Cement Bonde	d Castable	
	and restrictions on u		u Castable	
Use of the substance/mixture		Refractory		
3. Supplier				
Resco Products, Inc.				
One Robinson Plaza, Suite 30	00			
6600 Steubenville Pike	1.01-1			
Pittsburgh, PA 15205 - United 412-494-4491	I States			
SDS@RescoProducts.com - \	WWW RescoProducts	com		
4. Emergency telephor				
Emergency number		EMERGENCY ONLY (CHEMTE	EC) USA & Canad	a 1-800-424-9300
		Outside USA & Canada +1 703		
ECTION 2: Hazard(s) i				
	e substance or mixtu	re		
HS-US classification Skin corrosion/irritation	H315	Causes skin irritation		
Category 2				
Serious eye damage/eye	H320	Causes eye irritation		
rritation Category 2B				
Carcinogenicity Category	H350	May cause cancer (Inha	lation)	
1A				
ull text of H statements : see s				
	s, including precaution	onary statements		
HS-US labeling	, ,	•		
Hazard pictograms (GHS-US)) :	\wedge		
Signal word (GHS-US) Hazard statements (GHS-US) Precautionary statements (GH	,	Danger H315 - Causes skin irritation H320 - Causes eye irritation H350 - May cause cancer (Inha P280 - Wear eye protection, Du P305+P351+P338 - If in eyes: F lenses, if present and easy to do P332+P313 - If skin irritation oc	st respirator, protectionse cautiously with Continue rinsing	h water for several minutes. Remove contac
		P337+P313 - If eye irritation per		
		P260 - Do not breathe dust.		
		ssification		
o additional information availa				
o additional information availa 4. Unknown acute toxi				
o additional information availa 4. Unknown acute toxi ot applicable	on/Information.ou	n ingredients		
o additional information availa 4. Unknown acute toxi ot applicable ECTION 3: Composition	on/Information o	n ingredients		
o additional information availa 4. Unknown acute toxi ot applicable ECTION 3: Composition 1. Substances	on/Information o	n ingredients		
additional information availa 4. Unknown acute toxi bt applicable ECTION 3: Composition 1. Substances bt applicable	on/Information o	n ingredients		
additional information availa Unknown acute toxi tapplicable ECTION 3: Compositional Substances tapplicable	on/Information o	n ingredients	%	GHS-US classification
additional information availa 4. Unknown acute toxi bt applicable ECTION 3: Composition 1. Substances bt applicable 2. Mixtures	on/Information o		% 20 - 50	Skin Irrit. 2, H315
additional information availa 4. Unknown acute toxi bt applicable ECTION 3: Composition 1. Substances ot applicable 2. Mixtures Name	on/Information o	Product identifier		
additional information availa Unknown acute toxi tapplicable ECTION 3: Compositio 1. Substances ot applicable 2. Mixtures Name Calcium Aluminate Cement	on/Information o	Product identifier (CAS-No.) 65997-16-2	20 - 50	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
additional information availa Unknown acute toxi ot applicable ECTION 3: Compositio Substances ot applicable Calcium Aluminate Cement cristobalite quartz		Product identifier (CAS-No.) 65997-16-2 (CAS-No.) 14464-46-1 (CAS-No.) 14808-60-7	20 - 50 5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Carc. 1A, H350
additional information availa Unknown acute toxi ot applicable CTION 3: Compositio Substances applicable Calcium Aluminate Cement Cristobalite quartz Ull text of hazard classes and	H-statements : see se	Product identifier (CAS-No.) 65997-16-2 (CAS-No.) 14464-46-1 (CAS-No.) 14808-60-7	20 - 50 5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Carc. 1A, H350
additional information availa Unknown acute toxi applicable ECTION 3: Composition Capplicable Capplicable Calcium Aluminate Cement Cristobalite quartz Ull text of hazard classes and ECTION 4: First-aid mode	H-statements : see se easures	Product identifier (CAS-No.) 65997-16-2 (CAS-No.) 14464-46-1 (CAS-No.) 14808-60-7	20 - 50 5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Carc. 1A, H350
o additional information availa 4. Unknown acute toxi ot applicable ECTION 3: Compositio 1. Substances ot applicable 2. Mixtures Name Calcium Aluminate Cement cristobalite quartz ull text of hazard classes and ECTION 4: First-aid mode	H-statements : see se easures aid measures	Product identifier (CAS-No.) 65997-16-2 (CAS-No.) 14464-46-1 (CAS-No.) 14808-60-7 ction 16	20 - 50 5 - 10 5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Carc. 1A, H350
additional information availa Unknown acute toxi ot applicable ECTION 3: Compositio Substances ot applicable Unixtures Name Calcium Aluminate Cement cristobalite quartz ull text of hazard classes and ECTION 4: First-aid mo 1. Description of first a	H-statements : see se easures aid measures	Product identifier (CAS-No.) 65997-16-2 (CAS-No.) 14464-46-1 (CAS-No.) 14808-60-7 ction 16	20 - 50 5 - 10 5 - 10 o an unconscious p ossible).	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Carc. 1A, H350 Carc. 1A, H350

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First-aid measures after skin con First-aid measures after eye cont		IF IN EYES: Rinse	f soap and water. Wash contaminated clothing before reuse. cautiously with water for several minutes. Remove contact lenses, if present		
First-aid measures after ingestion	n :	and easy to do. Co Rinse mouth. Do N	ntinue rinsing. OT induce vomiting. Obtain emergency medical attention.		
4.2. Most important sympto	oms and effects (a	acute and delayed)			
Potential Adverse human health			data, the classification criteria are not met.		
symptoms Symptoms/effects after inhalatior	י ו :	May cause cancer through inhalation.	by inhalation. Danger of serious damage to health by prolonged exposure		
Symptoms/effects after skin cont Symptoms/effects after eye conta		Causes skin irritatio Causes eye irritatio			
4.3. Immediate medical atte	· · · · · ·	I treatment, if nece	ssary		
SECTION 5: Fire-fighting					
5.1. Suitable (and unsuitab		media			
Suitable extinguishing media Unsuitable extinguishing media		Use extinguishing r	nedia appropriate for surrounding fire. guishing media known.		
5.2. Specific hazards arisin	g from the chemi	cal			
Fire hazard Reactivity		Not flammable. Hydraulic setting.			
5.3. Special protective equi Firefighting instructions			ers hen fighting any chemical fire. Prevent fire-fighting water from entering		
0 0		environment.			
Protection during firefighting			ea without proper protective equipment, including respiratory protection.		
SECTION 6: Accidental re 6.1. Personal precautions,			w procedures		
6.1.1. For non-emergency pe	rsonnel				
Emergency procedures 6.1.2. For emergency respon		Do not breathe dus	t.		
Protective equipment	:	Equip cleanup crev	v with proper protection.		
Emergency procedures	:	Ventilate area.			
6.2. Environmental precaut					
Prevent entry to sewers and public	c waters.				
6.3. Methods and material f Methods for cleaning up			shovel into suitable containers. Minimize generation of dust.		
6.4. Reference to other sec		Officiality, Sweep of			
See Heading 8. Exposure controls		ection.			
SECTION 7: Handling and					
7.1. Precautions for safe ha					
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			ther exposed areas with mild soap and water before eating, drinking or		
7.2. Conditions for safe sto					
Storage conditions			n a dry location where it can be protected from the elements.		
Incompatible products		Strong bases. Stron	ng acids.		
SECTION 8: Exposure con	ntrois/persona	Il protection			
8.1. Control parameters					
Calcium Aluminate Cement (65997-16-2)				
Not applicable					
cristobalite (14464-46-1)					
ACGIH	ACGIH TWA (mg	/m³)	0.025 mg/m ³ (Silica-Crystalline Cristobalite; 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 dust		
quartz (14808-60-7)					
ACGIH	ACGIH TWA (mg	/m³)	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		
OSHA	Remark (OSHA)		(3) See Table Z-3.		
8.2. Appropriate engineerin	a controls				

No additional information available

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8.3. Individual protection measures/Pers Personal protective equipment:	sonal 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 c	
Physical state	: Solid
Appearance	: Granular mixture.
Color	: brown
Odor	: Earthy Odor
Odor threshold	: Not applicable
рН	: No data available
Melting point	: > 2500 °F
Freezing point	: Not applicable
Boiling point	: Not applicable
Critical temperature	: Not applicable
Critical pressure Flash point	: Not applicable : Not applicable
Relative evaporation rate (butyl acetate=1)	: Not applicable
Relative evaporation rate (ether=1)	: Not applicable
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: Not Applicable
Vapor pressure at 50 °C Relative vapor density at 20 °C	: Not Applicable : No data available
Relative density	: ≈1
Solubility	: Slightly soluble.
Log Pow	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity	: Not Applicable
Viscosity, kinematic	: Not Applicable
Viscosity, dynamic	: Not Applicable
Explosion limits	: Not applicable
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	
Hydraulic setting.	
10.2. Chemical stability Not established.	
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	

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ECTION 11: Toxicological information	n
1.1. Information on toxicological effects	
Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer (Inhalation).
cristobalite (14464-46-1)	1. Carainagania ta humana
IARC group	1 - Carcinogenic to humans
quartz (14808-60-7)	1
IARC group	1 - Carcinogenic to humans
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated	: Not classified
exposure	· Not all spitial
	 Not classified Based on available data, the classification criteria are not met.
symptoms	
	: May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure
	through inhalation.
	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes eye irritation.
ECTION 12: Ecological information	
2.1. Toxicity	
o additional information available	
2.2. Persistence and degradability	
Rescocast 3A Panel Mix Castable (Mixture)	1
Persistence and degradability	Not established.
cristobalite (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.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
2.3. Bioaccumulative potential	
Rescocast 3A Panel Mix Castable (Mixture)	1
Bioaccumulative potential	Not established.
cristobalite (14464-46-1)	
Bioaccumulative potential	No test data available.
quartz (14808-60-7)	· · · · · · · · · · · · · · · · · · ·
Bioaccumulative potential	No bioaccumulation data available.
2.4. Mobility in soil	
o additional information available	
2.5. Other adverse effects	
Effect on the global warming	None known
Other information	: Avoid release to the environment.
ECTION 13: Disposal considerations	
3.1. Disposal methods	
3.1. Disposal methods Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Bisposal methods Product/Packaging disposal recommendations Ecology - waste materials	 Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.
Bisposal methods Product/Packaging disposal recommendations Ecology - waste materials ECTION 14: Transport information	
Bisposal methods Product/Packaging disposal recommendations Ecology - waste materials	

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	f Dangerous Goods					
Not regulated						
Transport by sea Not regulated	l					
Air transport						
Not regulated						
3	Regulatory inform	mation				
5.1. US Federal re	egulations					
Substances Con	trol Act (TSCA) inven		ded from lis	ting, on the United States	Environmental Protection Ag	ency Toxic
5.2. International ANADA	regulations					
o additional inform	nation available					
U-Regulations						
o additional inform ational regulation						
quartz (14808-6						
Listed on IARC (International Agency	for Researc	h on Cance	r)		
5.3. US State regi	ulations					
	Panel Mix Castable (Mixture)				
U.S California information	California - Proposition 65 - Other This product contains crystalline silica, a chemical known to the state of California cause cancer.				state of California to	
cristobalite (144	464-46-1)					
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)	Maximum allowable dose level (MADL)
Yes	No	No		No		
quartz (14808-6	0-7)	-			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)	Maximum allowable dose level (MADL)
Yes	No	No		No		
cristobalite (144	161-16-1)					
•	ey - Right to Know Ha	zardous Sul	ostance List			
guartz (14808-6	· •					
• •	ey - Right to Know Ha	zardous Sul	ostance List	1		
	Other information					
Revision date Other information Full text of H-phra					the event of any conflict betw ion shall prevail.	een English and other
H315		Causes el	kin irritation			
H320			ve irritation			
H350			•			
1330		May caus	e cancer			

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.