

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Supersedes: 10/13/2015 Date of issue: 07/25/2017 Revision date: 07/25/2017

SECTION 1: Identification

1.1. Identification

Product form Mixtures

Vibrocast ASC 4LG TL0918 Product name

CAS-No. Mixture Product code 4417

Other means of identification Alumina Cement Bonded Castable

Recommended use and restrictions on use 1.2. 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

Emergency telephone number

: EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300 Emergency number

Outside USA & Canada +1 703-741-5970

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation H315 Causes skin irritation Category 2 Serious eye damage/eye H320 Causes eye irritation

irritation Category 2B

Carcinogenicity Category H350 May cause cancer (Inhalation)

Full text of H statements : see section 16

GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS08

: Danger Signal word (GHS-US)

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

Other hazards which do not result in classification

No additional information available

Unknown acute toxicity (GHS US) 2.4.

Not applicable

SECTION 3: Composition/Information on ingredients

Not applicable

3.2. **Mixtures**

Name	Product identifier	%	GHS-US classification
aluminium oxide, non-fibrous	(CAS-No.) 1344-28-1	75 - 95	Not classified
Calcium Aluminate Cement	(CAS-No.) 65997-16-2	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
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

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).

07/25/2017 EN (English US) Page 1

Safety Data Sheet

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

First-aid measures after inhalation : Allow victim 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. Get medical advice/attention if you feel unwell. Do not induce vomiting.

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

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.

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 : 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 : Non-flammable.
Reactivity : Hydraulic setting.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : No specific fire-fighting instructions required.

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

Protective equipment : Avoid creating or spreading dust.

Emergency procedures : Do not breathe dust.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : On land, sweep or shovel into suitable containers.

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 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

aluminium oxide, non-	uminium oxide, non-fibrous (1344-28-1)		
ACGIH	ACGIH TWA (mg/m³)	1 mg/m³ (Aluminium, insoluble compounds; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)	
Calcium Aluminate Cement (65997-16-2)			
Not applicable			
cristobalite (14464-46-1)			
ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³ (Silica-Crystalline Cristobalite; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)	
OSHA	OSHA PEL (TWA) (mg/m³)	0.05 mg/m³ respirable dust	

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves

Eve protection:

Chemical goggles or safety glasses

07/25/2017 EN (English US) 2/5

Safety Data Sheet

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

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear appropriate mask

Other information:

Boiling point

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 : white
Odor : odorless
Odor threshold : Not applicable
pH : No data available
Melting point : > 3000 °F
Freezing point : Not applicable

: Not applicable

No data available

: No data available

Critical temperature Not applicable Critical pressure Not applicable Flash point 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 Not Applicable Vapor pressure at 50 °C

Relative density : ≈ 2.9

Solubility Slightly soluble. : No data available Log Pow Auto-ignition temperature Not applicable Decomposition temperature No data available Not Applicable Viscosity Viscosity, kinematic Not Applicable Viscosity, dynamic Not Applicable **Explosion limits** Not Applicable No data available Explosive properties

9.2. Other information

Relative vapor density at 20 °C

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Oxidizing properties

Hydraulic setting.

10.2. Chemical stability

Stable under normal conditions.

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 : Not classified

aluminium oxide, non-fibrous (1344-28-1)	
LD50 oral rat	> 15900 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Experimental value)
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified

07/25/2017 EN (English US) 3/5

Safety Data Sheet

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

Carcinogenicity	: May cause cancer (Inhalation).		
cristobalite (14464-46-1)			
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		
xposure spiration hazard	: Not classified		
Potential Adverse human health effects and	: Based on available data, the classification criteria are not met.		
ymptoms	. Based on available data, the classification entertal are not met.		
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.		
ymptoms/effects after eye contact	: Causes eye irritation.		
SECTION 12: Ecological information			
2.1. Toxicity			
aluminium oxide, non-fibrous (1344-28-1)			
LC50 fish 1	> 100 mg/l (NOEC; OECD 203: Fish, Acute Toxicity Test; 96 h; Salmo trutta; Flow-through		
	system; Fresh water; Experimental value)		
EC50 Daphnia 1	> 100 mg/l (NOEC; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna)		
Threshold limit algae 1	> 100 mg/l (NOEC; OECD 201: Alga, Growth Inhibition Test; 72 h; Selenastrum		
	capricornutum)		
2.2. Persistence and degradability			
Vibrocast ASC 4LG TL0918 (Mixture)			
Persistence and degradability	Not established.		
aluminium oxide, non-fibrous (1344-28-1)			
Persistence and degradability	Biodegradability: not applicable.		
<u> </u>			
Biochemical oxygen demand (BOD)	Not applicable		
Chemical oxygen demand (COD)	Not applicable		
ThOD	Not applicable		
cristobalite (14464-46-1)			
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Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 2.3. Bioaccumulative potential	Not applicable Not applicable		
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Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 2.3. Bioaccumulative potential Vibrocast ASC 4LG TL0918 (Mixture) Bioaccumulative potential aluminium oxide, non-fibrous (1344-28-1) Bioaccumulative potential cristobalite (14464-46-1) Bioaccumulative potential 2.4. Mobility in soil Io additional information available	Not applicable Not applicable Not applicable Not established. No bioaccumulation data available.		
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Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 2.3. Bioaccumulative potential Vibrocast ASC 4LG TL0918 (Mixture) Bioaccumulative potential aluminium oxide, non-fibrous (1344-28-1) Bioaccumulative potential cristobalite (14464-46-1) Bioaccumulative potential 2.4. Mobility in soil Io additional information available	Not applicable Not applicable Not applicable Not established. No bioaccumulation data available. No test data available. : No known effects from this product.		
Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 2.3. Bioaccumulative potential Vibrocast ASC 4LG TL0918 (Mixture) Bioaccumulative potential aluminium oxide, non-fibrous (1344-28-1) Bioaccumulative potential cristobalite (14464-46-1) Bioaccumulative potential 2.4. Mobility in soil to additional information available 2.5. Other adverse effects Effect on the global warming	Not applicable Not applicable Not applicable Not established. No bioaccumulation data available. No test data available. : No known effects from this product. None known		
Persistence and degradability Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ThOD 2.3. Bioaccumulative potential Vibrocast ASC 4LG TL0918 (Mixture) Bioaccumulative potential aluminium oxide, non-fibrous (1344-28-1) Bioaccumulative potential cristobalite (14464-46-1) Bioaccumulative potential 2.4. Mobility in soil lo additional information available 2.5. Other adverse effects	Not applicable Not applicable Not applicable Not established. No bioaccumulation data available. No test data available. In No known effects from this product. None known No known effects from this product. None known No known effects from this product.		

13.1. Disposal methods

: Do not discharge into the sewer. : Avoid release to the Product/Packaging disposal recommendations Ecology - waste materials

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated Avoid release to the environment.

Transportation of Dangerous Goods Not regulated

Transport by sea
Not regulated

07/25/2017 EN (English US) 4/5

Safety Data Sheet

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

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

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

Subject to reporting requirements of United States SARA Section 313

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Vibrocast ASC 4LG TL0918 (Mixture)	
U.S California - Proposition 65 - Other This product contains crystalline silica, a chemical known to the state of California to ca	
information	cancer.

cristobalite (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	

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

U.S. - New Jersey - Right to Know Hazardous Substance List

cristobalite (14464-46-1)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Revision date

: 07/25/2017

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:

uii text of 11-prilases.			
	H315	Causes skin irritation	
	H320	Causes eye irritation	
	H350	May cause cancer	

SDS US (GHS HazCom 2012)

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.

07/25/2017 EN (English US) 5/5