



Furnacon 80

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Date of issue: 03/17/2016 Supersedes: 06/02/2015

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Furnacon 80
CAS No : Mixture
Product code : 8950
Other means of identification : Alumina-Silicate Cement Bonded Castable

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Refractory

1.3. Details of the supplier of the safety data sheet

Resco Products, Inc.
One Robinson Plaza, Suite 300
6600 Steubenville Pike
Pittsburgh, PA 15205 - United States
412-494-4491
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 Irrit. 2 H315 - Causes skin irritation
Eye Irrit. 2B H320 - Causes eye irritation
Carc. 1A H350 - May cause cancer (Inhalation)

Full text of H-phrases: see section 16

2.2. Label elements

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

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
aluminium oxide, non-fibrous	(CAS No) 1344-28-1	50 - 75	Not classified
Calcium Aluminate Cement	(CAS No) 65997-16-2	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2B, H320
barium sulfate	(CAS No) 7727-43-7	1 - 5	Not classified
cristobalite	(CAS No) 13453-70-8	0.1 - 1	Carc. 1A, H350

Full text of H-phrases: 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 victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse.

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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, both acute and delayed

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

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable.

Reactivity : Hydraulic setting.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. 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 : 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

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

cristobalite (13453-70-8)		
ACGIH	ACGIH TWA (mg/m ³)	0.025 mg/m ³ respirable dust
OSHA	OSHA PEL (TWA) (mg/m ³)	0.05 mg/m ³ respirable dust
barium sulfate (7727-43-7)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ (Barium sulfate; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica)
aluminium oxide, non-fibrous (1344-28-1)		
ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³ (Aluminium, insoluble compounds; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)

8.2. Exposure controls

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.

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Color	: White to grey
Odor	: Earthy Odor
Odor threshold	: Not applicable
pH	: No data available
Melting point	: > 2000 °F
Freezing point	: Not applicable
Boiling point	: Not applicable
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)	: None
Explosion limits	: Not applicable
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: Not Applicable
Vapor pressure at 50 °C	: Not Applicable
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Solubility	: No data available
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

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

barium sulfate (7727-43-7)

LD50 oral rat	> 5000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
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aluminium oxide, non-fibrous (1344-28-1)

LD50 oral rat	> 15900 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Experimental value)
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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 (13453-70-8)

IARC group	1 - Carcinogenic to humans
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Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified

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Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation	: May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

barium sulfate (7727-43-7)	
EC50 Daphnia 1	32 mg/l (EC50; 48 h)
Threshold limit algae 1	≥1.92,NOEC; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value

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)

12.2. Persistence and degradability

Furnacon 80 (Mixture)	
Persistence and degradability	Not established.

crystalite (13453-70-8)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

barium sulfate (7727-43-7)	
Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

aluminium oxide, non-fibrous (1344-28-1)	
Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the substance available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

Furnacon 80 (Mixture)	
Bioaccumulative potential	Not established.

crystalite (13453-70-8)	
Bioaccumulative potential	No bioaccumulation data available.

barium sulfate (7727-43-7)	
BCF fish 1	68.4 (BCF; Lepomis macrochirus)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

aluminium oxide, non-fibrous (1344-28-1)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.
None known

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

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SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not regulated for transport

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Calcium Aluminate Cement (65997-16-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

crystalite (13453-70-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

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WHMIS Classification	D2A
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EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

Furnacon 80 (Mixture)

U.S. - California - Proposition 65 - Other information	This product contains crystalline silica, a chemical known to the state of California to cause cancer.
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crystalite (13453-70-8)

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	Non-significant risk level (NSRL)
Yes	No	No	No	

crystalite (13453-70-8)

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

SECTION 16: Other information

Other information : None.

Full text of H-phrases:

Carc. 1A	Carcinogenicity Category 1A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Irrit. 2	Skin corrosion/irritation Category 2
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.