

## 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: 6/6/2024 Supersedes: 4/30/2021

## **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture
Product name : PuroTab
CAS-No. : Mixture
Product code : 1064

Other means of identification : Alumina 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 protective gloves/protective clothing/eye protection.

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/fume/gas/mist/vapors/spray.

## 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
aluminium oxide, non-fibrous	CAS-No.: 1344-28-1	50 – 75	Not classified
Calcium Aluminate Cement	CAS-No.: 65997-16-2	20 – 50	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

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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).

Allow affected person to breathe fresh air. Allow the victim to rest. First-aid measures after inhalation

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)

Potential Adverse human health effects and Danger of serious damage to health by prolonged exposure through inhalation.

symptoms

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

> cancer by 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

Protective equipment : Avoid creating or spreading dust.

6.1.2. For emergency responders Protective equipment : Equip cleanup crew with proper protection.

#### 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

No additional information available

# 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.

Wash hands and other exposed areas with mild soap and water before eating, drinking or Hygiene measures

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

# PuroTab (Mixture)

No additional information available

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

**USA - ACGIH - Occupational Exposure Limits** 

ACGIH OEL TWA 1 mg/m3 respirable dust

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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/m³ respirable dust
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	0.05 mg/m³ respirable dust
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#### 8.2. Appropriate engineering controls

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

#### 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

## **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 : No data available pH : ≈ 10.5

pH solution concentration 10 % Melting point > 3000 °F 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. No data available Vapor pressure Relative vapor density at 20°C No data available

Relative density : ≈ 2.7

Solubility Slightly soluble. No data available Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature No data available No data available Decomposition temperature Viscosity, kinematic No data available Viscosity, dynamic No data available **Explosion limits** No data available 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

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No additional information available

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symptoms Symptoms/effects after inhalation

Symptoms/effects after skin contact

Symptoms/effects after eye contact

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10.4. Conditions to avoid	
No additional information available	
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition products	
No additional information available	
SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: 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
aluminium oxide, non-fibrous (1344-28-1)	
рН	9 – 10.5 (aqueous suspension, 33 %)
Calcium Aluminate Cement (65997-16-2)	
рН	≤ 13
cristobalite (14464-46-1)	
рН	6 – 7
Serious eye damage/irritation	: Causes eye irritation. pH: ≈ 10.5
aluminium oxide, non-fibrous (1344-28-1)	
pH	9 – 10.5 (aqueous suspension, 33 %)
Calcium Aluminate Cement (65997-16-2)	
рН	≤ 13
cristobalite (14464-46-1)	
рН	6 – 7
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity  Pagraductive toxicity	: May cause cancer (Inhalation).
Reproductive toxicity STOT-single exposure	: Not classified : Not classified
	: Not classified : Not classified
STOT-repeated exposure Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
aluminium oxide, non-fibrous (1344-28-1)	
Viscosity, kinematic	Not applicable (solid)
Potential Adverse human health effects and	: Danger of serious damage to health by prolonged exposure through inhalation.

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cancer by inhalation.

Causes skin irritation.

: Causes eye irritation.

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

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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		
aluminium oxide, non-fibrous (1344-28-1)		
Persistence and degradability	Not applicable.	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
cristobalite (14464-46-1)		
Persistence and degradability	Mineral. Not applicable.	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	
12.3. Bioaccumulative potential		
aluminium oxide, non-fibrous (1344-28-1)		
Bioaccumulative potential	No data available.	
cristobalite (14464-46-1)		
Bioaccumulative potential	No data available.	
12.4. Mobility in soil		
aluminium oxide, non-fibrous (1344-28-1)		
Surface tension	No data available in the literature	
Ecology - soil	No data available.	
cristobalite (14464-46-1)		
Ecology - soil	No data available.	
12.5. Other adverse effects  No additional information available		

## **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

Product/Packaging disposal recommendations : Do not discharge into the sewer.

# **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

# **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

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aluminium oxide, non-fibrous (1344-28-1)
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Not subject to reporting requirements of the United States SARA Section 313

Note: The section 313 chemical list contains "CAS # 1344-28-1 Aluminum Oxide (Fibrous forms)"; the Aluminum oxide contained in this product is non-fibrous, and thus is not a section 313 material. Only manufacturing, processing, or otherwise use of aluminum oxide in the fibrous form triggers reporting.

## 15.2. International regulations

#### **CANADA**

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

Listed on the Canadian DSL (Domestic Substances List)

## 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**

No additional information available

**National regulations** 

No additional information available

## 15.3. US State regulations

#### PuroTab (Mixture)

U.S. - California - Proposition 65 - Other information

This product can expose you to cristobalite, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

	- /				
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
	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
	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

## **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.

versions, the English version shall prevail.		
Full text of I	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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