

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 11/23/2022 Revision date: 11/23/2022 Supersedes: 02/01/2021

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Paco #53 High AL

CAS-No. : Mixture Product code : 0053

Other means of identification : Alumina-Silicate Block

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 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

Carcinogenicity Category 1A H350 May cause cancer (Inhalation, Dust when sawing or tear out)

Specific target organ toxicity – Single exposure, Category 3, H335 May cause respiratory irritation

Respiratory tract irritation

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) : H350 - May cause cancer (Inhalation, Dust when sawing or tear out)

May dry/chap skin.

Dust from sawing or tear out may irritate eye.

Precautionary statements (GHS US) : P260 - Do not breathe dust.

P280 - Wear Safety shoes, protective gloves, 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.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

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 | 10 – 20 | Not classified |
| cristobalite | CAS-No.: 14464-46-1 | 1 – 5 | Carc. 1A, H350 |

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.

Safety Data Sheet

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

First-aid measures after inhalation : Allow affected person to breathe fresh air. 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. 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 : Not irritating. Irritation.

Symptoms/effects after eye contact : Dust from sawing or tear out may irritate eye.

Symptoms/effects after ingestion : No data available.

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.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : No specific fire-fighting instructions required.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Collect spillage.

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 : Wear Safety shoes, Gloves.

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Paco #53 High AL (Mixture)

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

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

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA 1 mg/m³ respirable dust

8.2. Appropriate engineering controls

Appropriate engineering controls : Dust when sawing or tear out. Provide adequate ventilation to minimize dust concentrations.

11/23/2022 (Revision date) EN (English US) 2/5

Safety Data Sheet

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

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear protective gloves.

Skin and body protection:

Safety shoes

Respiratory protection:

Dust when sawing or tear out. Wear appropriate mask

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Tan Colored Brick Shape.

Color : light brown Odor : None

Odor threshold : No data available pH : No data available Melting point : > 2500 °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) Non flammable. Vapor pressure No data available Relative vapor density at 20 °C No data available Relative density ≈ 2.3

Solubility Insoluble in water. Partition coefficient n-octanol/water (Log Pow) No data available Auto-ignition temperature No data available Decomposition temperature No data available 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

None known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

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

Acute toxicity (oral) : 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 : Not classified

11/23/2022 (Revision date) EN (English US) 3/5

Safety Data Sheet

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

| cristobalite (14464-46-1) | |
|--|--|
| pH | 6-7 |
| aluminium oxide, non-fibrous (1344-28-1) | |
| pH | 9 – 10.5 (aqueous suspension, 33 %) |
| Serious eye damage/irritation : | Not classified |
| cristobalite (14464-46-1) | |
| рН | 6-7 |
| aluminium oxide, non-fibrous (1344-28-1) | |
| рН | 9 – 10.5 (aqueous suspension, 33 %) |
| Respiratory or skin sensitization : | Not classified |
| Germ cell mutagenicity : | Not classified |
| Carcinogenicity : | May cause cancer (Inhalation, Dust when sawing or tear out). |
| Reproductive toxicity : | Not classified |
| STOT-single exposure : | May cause respiratory irritation. |
| STOT-repeated exposure : | Not classified |
| Aspiration hazard : | Not classified |
| Viscosity, kinematic : | No data available |
| aluminium oxide, non-fibrous (1344-28-1) | Not applicable (activity |
| Viscosity, kinematic | Not applicable (solid) |
| 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 : | Not irritating. Irritation. |
| Symptoms/effects after eye contact : | Dust from sawing or tear out may irritate eye. |
| Symptoms/effects after ingestion : | No data available. |
| 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 | |
| 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 |
| 12.3. Bioaccumulative potential | |
| cristobalite (14464-46-1) | |
| Bioaccumulative potential | No data available. |
| aluminium oxide, non-fibrous (1344-28-1) | |
| 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 | |
| No additional information available | |
| SECTION 13: Disposal considerations | |

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

11/23/2022 (Revision date) EN (English US) 4/5

Safety Data Sheet

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

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

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

Not subject to reporting requirements of the United States SARA Section 313

Noto

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

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

No additional information available

15.3 US State regulations

| 13.3. 03 State regul | alions | | | | |
|-----------------------|---|-----------------------|-----------------------|------------------------|-------------------|
| Paco #53 High AL (| Mixture) | | | | |
| U.S California - Prop | 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 | | | of California to cause | |
| cristobalite (14464- | 46-1) | | | | |
| 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 | Reproductive Toxicity | | |
| | | - Female | - 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 |

SECTION 16: Other information

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

Revision date : 11/23/2022

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 | | |
|------------------------|----------------------------------|--|
| H335 | May cause respiratory 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.

11/23/2022 (Revision date) EN (English US) 5/5