

## 1. Identification

|                                      |   |
|--------------------------------------|---|
| <b>Product identifier</b>            | <b>ALCOR</b>  |
| <b>Other means of identification</b> |   |
| <b>Brand Code</b>                    | 1047  |
| <b>Recommended use</b>               | For Industrial Use Only   |
| <b>Recommended restrictions</b>      | Users should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations. |

### Manufacturer/Supplier information

#### Manufacturer

|                               |   |                |  |
|-------------------------------|---|----------------|--|
| <b>Company name</b>           | HarbisonWalker International  |                |  |
| <b>Address</b>                | 1305 Cherrington Parkway, Suite 100<br>Moon Township, Pennsylvania 15108 US |                |  |
| <b>Telephone</b>              | General Phone:  | 412-375-6600   |  |
| <b>Website</b>                | www.thinkHWI.com  |                |  |
| <b>Emergency phone number</b> | CHEMTREC 24 HOUR<br>EMERGENCY #   | 1-800-424-9300 |  |

## 2. Hazard(s) identification

### Classified hazards

This item is defined as an article per OSHA (29 CFR 1910.1200) and is therefore exempt from labeling. A Safety Data Sheet is available.

This item is not hazardous per OSHA 29 CFR 1910.1200(c). However, individual customer processes (such as grinding, sawing, or blasting) may result in the formation of dust that may present health hazards. May cause respiratory irritation, lung injury, or cancer by inhalation. Limit skin contact. Wash hands after handling. Dispose of waste and residues in accordance with local authority requirements. Wear protective gloves/protective clothing/eye protection. Dust may cause cancer.

### Label elements

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### Hazard(s) not otherwise classified (HNOC)

This item is defined as an article per OSHA (29 CFR 1910.1200) and is therefore exempt from labeling. A Safety Data Sheet is available.

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## 3. Composition/information on ingredients

### Mixtures

| Chemical name  | Common name and synonyms | CAS number | %        |
|--|--------------------------|------------|----------|
| Aluminium Oxide (Non-Fibrous)                                  |                          | 1344-28-1  | 60 - 80  |
| Mullite  |                          | 1302-93-8  | 10 - 20  |
| ALUMINIUM ORTHOPHOSPHATE                                       |                          | 7784-30-7  | 2.5 - 10 |
| Silicon Dioxide  |                          | 7631-86-9  | 2.5 - 10 |
| ALUMINUM TITANIUM OXIDE<br>(AL <sub>2</sub> TiO <sub>5</sub> ) |                          | 12004-39-6 | 1 - 2.5  |

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

#: This substance has been assigned Community workplace exposure limit(s).

**Composition comments** The full text for all R- and H-phrases is displayed in section 16.

#### 4. First-aid measures

##### Inhalation

Move to fresh air. If symptoms are experienced, remove source of contamination or move victim to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention immediately. Call a POISON CENTER or doctor/physician if you feel unwell. Get medical attention, if needed.

##### Skin contact

Before washing use a dry brush to remove dust from skin. Remove contaminated clothing. Remove and isolate contaminated clothing and shoes. Immediately flush skin with plenty of water. Wash off with soap and plenty of water. Rinse skin with water/shower. Get medical attention immediately. For minor skin contact, avoid spreading material on unaffected skin. Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash clothing separately before reuse.

##### Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Rinse cautiously with water for several minutes. Rinse with water. If a contact lens is present, DO NOT delay irrigation or attempt to remove the lens. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately. Get medical attention if irritation develops and persists.

##### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Call a POISON CENTER or doctor/physician if you feel unwell. Never give anything by mouth to a victim who is unconscious or is having convulsions. Rinse mouth. Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If ingestion of a large amount does occur, call a poison control center immediately.

##### Most important symptoms/effects, acute and delayed

Discomfort in the chest. Shortness of breath. Coughing. Edema. Proteinuria. Irritation of eyes and mucous membranes. Prolonged exposure may cause chronic effects. Irritant effects.

##### Indication of immediate medical attention and special treatment needed

In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

##### General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Immediate medical attention is required. If concerned: Get medical advice. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Get medical attention if symptoms occur. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

#### 5. Fire-fighting measures

##### Suitable extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

##### Unsuitable extinguishing media

Not available.

##### Specific hazards arising from the chemical

Not applicable.

##### Special protective equipment and precautions for firefighters

Not available.

#### 6. Accidental release measures

##### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material. Keep people away from and upwind of spill/leak. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering them. Ensure adequate ventilation.

##### Methods and materials for containment and cleaning up

Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. Cover with plastic sheet to prevent spreading. Following product recovery, flush area with water.

##### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water. No special environmental precautions required.

## 7. Handling and storage

### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Do not get this material in contact with eyes. Do not get this material in contact with skin. Do not taste or swallow. Avoid contact with skin. Avoid contact with eyes. Do not get this material on clothing. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wash thoroughly after handling. Avoid release to the environment. Handle and open container with care.

### Conditions for safe storage, including any incompatibilities

Store locked up. Store in a well-ventilated place. Store in original tightly closed container. Keep container tightly closed. Store in a closed container away from incompatible materials. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children. Use care in handling/storage. Store in accordance with local/regional/national/international regulation.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components                                    | Type | Value                | Form                 |
|---|------|----------------------|----------------------|
| Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1) | PEL  | 5 mg/m <sup>3</sup>  | Respirable fraction. |
|   |      | 15 mg/m <sup>3</sup> | Total dust.          |

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

| Components                      | Type | Value                 |
|---------------------------------|------|-----------------------|
| Silicon Dioxide (CAS 7631-86-9) | TWA  | 0.8 mg/m <sup>3</sup> |
|                                 |      | 20 mppcf              |

#### US. ACGIH Threshold Limit Values

| Components   | Type | Value               | Form                 |
|--|------|---------------------|----------------------|
| ALUMINIUM ORTHOPHOSPHATE (CAS 7784-30-7)                                     | TWA  | 1 mg/m <sup>3</sup> | Respirable fraction. |
| Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)                                | TWA  | 1 mg/m <sup>3</sup> | Respirable fraction. |
| ALUMINUM TITANIUM OXIDE (AL <sub>2</sub> TiO <sub>5</sub> ) (CAS 12004-39-6) | TWA  | 1 mg/m <sup>3</sup> | Respirable fraction. |
| Mullite (CAS 1302-93-8)  | TWA  | 1 mg/m <sup>3</sup> | Respirable fraction. |

#### US. NIOSH: Pocket Guide to Chemical Hazards

| Components                      | Type | Value               |
|---------------------------------|------|---------------------|
| Silicon Dioxide (CAS 7631-86-9) | TWA  | 6 mg/m <sup>3</sup> |

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Exposure guidelines

Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas. Provide adequate general and local exhaust ventilation.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Do not get in eyes. Use personal protective equipment as required. Wear eye/face protection. Chemical goggles are recommended. Face-shield. Not normally needed. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### Skin protection

##### Hand protection

Wear protective gloves. Use personal protective equipment as required. Not normally needed.

|                                       |  |
|---------------------------------------|--|
| <b>Other</b>                          | Do not get this material in contact with skin. Do not get this material on clothing. Use personal protective equipment as required. Wear appropriate chemical resistant clothing. Wear suitable protective clothing. Structural firefighters protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations. Chemical resistant gloves. Wear protective gloves. Wear chemical protective equipment that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Normal work clothing (long sleeved shirts and long pants) is recommended. |
| <b>Respiratory protection</b>         | Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.  |
| <b>Thermal hazards</b>                | Not available.   |
| <b>General hygiene considerations</b> | When using, do not eat, drink or smoke. Do not breathe dust. Do not get in eyes. Do not get this material in contact with skin. Do not get this material on clothing. Avoid contact with eyes. Avoid contact with skin. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.  |

## 9. Physical and chemical properties

### Appearance

|                       |                |
|-----------------------|----------------|
| <b>Physical state</b> | Solid.         |
| <b>Form</b>           | Solid          |
| <b>Color</b>          | Not available. |

**Odor** Not available.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available.

**Flash point** Not available.

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not available.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** Not available.

**Vapor density** Not available.

**Relative density** Not available.

### Solubility(ies)

**Solubility (water)** Not available.

**Partition coefficient (n-octanol/water)** Not available.

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity** Not available.

## 10. Stability and reactivity

**Reactivity** Not available.

**Chemical stability** Material is stable under normal conditions.

**Possibility of hazardous reactions** Not available.

**Conditions to avoid** None under normal conditions.

**Incompatible materials** Acids. Chlorine.

**Hazardous decomposition products** May include oxides of phosphorus.

## 11. Toxicological information

### Information on likely routes of exposure

**Inhalation** Irritating to respiratory system. Not classified. Not available.  
**Skin contact** Corrosive effects. May be harmful in contact with skin. Causes skin irritation. Not available.  
**Eye contact** Causes serious eye irritation. Not available.  
**Ingestion** Harmful if swallowed. May be harmful if swallowed. Not available.

**Symptoms related to the physical, chemical and toxicological characteristics** Discomfort in the chest. Shortness of breath. Coughing. Edema. Proteinuria. Irritant effects.

### Information on toxicological effects

**Acute toxicity** Causes burns. Harmful if swallowed. May be harmful if swallowed. May be harmful in contact with skin.

**Skin corrosion/irritation** Hazardous by OSHA criteria. Corrosive effects. Causes skin irritation. Not available.

**Serious eye damage/eye irritation** Causes serious eye irritation. Not available.

### Respiratory or skin sensitization

**Respiratory sensitization** Not available.

**Skin sensitization** Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. Not available.

**Germ cell mutagenicity** Not available.

**Carcinogenicity** Hazardous by OSHA criteria. Hazardous by WHMIS criteria. In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.) Cancer hazard. In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003) May cause cancer. According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. Risk of cancer cannot be excluded with prolonged exposure.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Silicon Dioxide (CAS 7631-86-9) 3 Not classifiable as to carcinogenicity to humans.

### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

**Reproductive toxicity** Not available.

**Specific target organ toxicity - single exposure** Respiratory tract irritation. Not available.

**Specific target organ toxicity - repeated exposure** Causes damage to organs. . Not available.

**Aspiration hazard** Not available.

**Chronic effects** Hazardous by WHMIS criteria. Hazardous by OSHA criteria. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** Components of this product are hazardous to aquatic life. Not expected to be harmful to aquatic organisms.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** Not available.

**Mobility in soil** Not available.

**Other adverse effects** Not available.

### 13. Disposal considerations

**Disposal instructions** This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

**Hazardous waste code** Not applicable.

**Waste from residues / unused products** Not available.

**Contaminated packaging** Not available.

### 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not available.

### 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All chemical substances in this product are listed on the TSCA chemical substance inventory where required.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** No

#### SARA 313 (TRI reporting)

| Chemical name                 | CAS number | % by wt. |
|-------------------------------|------------|----------|
| Aluminium Oxide (Non-Fibrous) | 1344-28-1  | 60 - 80  |

#### Other federal regulations

##### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

##### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations** WARNING: This product contains a chemical known to the State of California to cause cancer.

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. Massachusetts RTK - Substance List**

Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)

Silicon Dioxide (CAS 7631-86-9)

**US. New Jersey Worker and Community Right-to-Know Act**

ALUMINIUM ORTHOPHOSPHATE (CAS 7784-30-7)

Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)

Silicon Dioxide (CAS 7631-86-9)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)

Silicon Dioxide (CAS 7631-86-9)

**US. Rhode Island RTK**

Aluminium Oxide (Non-Fibrous) (CAS 1344-28-1)

**US. California Proposition 65**

Not Listed.

**International Inventories**

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)   | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | Yes                    |
| New Zealand                 | New Zealand Inventory  | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision****Issue date** 05-15-2015**Version #** 01**Disclaimer** This information is based on our present knowledge on creation date. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.**Revision Information** Product and Company Identification: Material Attributes  
Composition / Information on Ingredients: After Reaction Composition