SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture: 'SAIRBOND
Registration number: -
Synonyms: None.
Brand Code: 5001
Issue date: 06-May-2019
Version number: 02
Revision date: 22-November-2019
Supersedes date: 06-May-2019

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

Identified uses: For Industrial or Professional Use Only
Uses advised against: Avoid dry cutting, blasting, or dust generation.

1.3. Details of the supplier of the safety data sheet

Supplier
Company name: HarbisonWalker International Limited
Address: Dock Road South
Bromborough
Wirral
UK
Division: United Kingdom
Telephone: General Phone: +44.(0)151.641.5900
e-mail: REACH@thinkhwi.com
Contact person: HWI USA

1.4. Emergency telephone number

+44 (0)151 641 5900 (Office hours 07:30 - 17:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards
- Skin corrosion/irritation Category 2 H315 - Causes skin irritation.
- Serious eye damage/eye irritation Category 2 H319 - Causes serious eye irritation.

Hazard summary
Causes serious eye irritation. Causes skin irritation. Occupational exposure to the substance or mixture may cause adverse health effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms

Signal word
Warning

Hazard statements
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.

Precautionary statements
Prevention
P264 Wash thoroughly after handling.
P280 Wear eye protection/face protection.
P280 Wear protective gloves.

**Response**

- **P302 + P352** IF ON SKIN: Wash with plenty of water.
- **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.
- **P362 + P364** Take off contaminated clothing and wash it before reuse.

**Storage**

Store away from incompatible materials.

**Disposal**

Dispose of waste and residues in accordance with local authority requirements.

**Supplemental label information**

None.

**2.3. Other hazards**

Not a PBT or vPvB substance or mixture.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

**General information**

**Chemical name**  
<table>
<thead>
<tr>
<th>Mullite</th>
<th>40 - 60</th>
<th>1302-93-8</th>
<th>215-113-2</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cristobalite</td>
<td>10 - 25</td>
<td>14464-46-1</td>
<td>238-455-4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Silicic acid, sodium salt</td>
<td>10 - 25</td>
<td>1344-09-8</td>
<td>215-687-4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>2.5 - 10</td>
<td>14808-60-7</td>
<td>238-878-4</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Classification:**

- Mullite
- Cristobalite
- Silicic acid, sodium salt
- Quartz (SiO2)

Other components below reportable levels

10 - 25

**List of abbreviations and symbols that may be used above**

#: This substance has been assigned Union workplace exposure limit(s).
M: M-factor
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.

Crystalline silica may be present at low concentrations; most of this is encapsulated in the coarse aggregate or as part of the clays or sands.

**SECTION 4: First aid measures**

**General information**

Not available.

**4.1. Description of first aid measures**

**Inhalation**

Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**

Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**

Rinse mouth. Get medical attention if symptoms occur.

**4.2. Most important symptoms and effects, both acute and delayed**

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

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

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
SECTION 5: Firefighting measures

General fire hazards

5.1. Extinguishing media

Suitable extinguishing media
Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media
Not available.

5.2. Special hazards arising from the substance or mixture

Not available.

5.3. Advice for firefighters

Special protective equipment for firefighters
Not available.

Special fire fighting procedures
Not available.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS.

For emergency responders
Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Avoid dust formation. For waste disposal, see section 13 of the SDS.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium Oxide</td>
<td>TWA</td>
<td>4 mg/m3</td>
<td>Respirable dust.</td>
</tr>
<tr>
<td>(Non-Fibrous) (CAS 1344-28-1)</td>
<td></td>
<td>10 mg/m3</td>
<td>Inhalable dust.</td>
</tr>
<tr>
<td>Cristobalite (CAS 14464-46-1)</td>
<td>TWA</td>
<td>1 fibers/mL</td>
<td>Fiber.</td>
</tr>
<tr>
<td>Kaolin (CAS 1332-58-7)</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Fiber.</td>
</tr>
<tr>
<td>Quartz (SiO2) (CAS 14808-60-7)</td>
<td>TWA</td>
<td>0.1 mg/m3</td>
<td>Respirable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 mg/m3</td>
<td>Respirable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.1 mg/m3</td>
<td>Respirable.</td>
</tr>
</tbody>
</table>
EU. OELs, Directive 2004/37/EC on carcinogen and mutagens from Annex III, Part A

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cristobalite (CAS 14464-46-1)</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>Respirable fraction and dust</td>
</tr>
<tr>
<td>Quartz (SiO₂) (CAS 14608-60-7)</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td>Respirable fraction and dust</td>
</tr>
</tbody>
</table>

**Biological limit values**
No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures**
Follow standard monitoring procedures.

**Derived no effect levels (DNELs)**
Not available.

**Predicted no effect concentrations (PNECs)**
Not available.

**Exposure guidelines**
Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled. Occupational Exposure Limits are not relevant to the current physical form of the product.

**8.2. Exposure 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. Provide eyewash station and safety shower.

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

**General information**
Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

**Eye/face protection**
Wear safety glasses with side shields (or goggles).

**Skin protection**
- **Hand protection**
  Wear appropriate chemical resistant gloves.
- **Other**
  Wear appropriate chemical resistant clothing.

**Respiratory protection**
Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

**Thermal hazards**
Wear appropriate thermal protective clothing, when necessary.

**Hygiene measures**
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**Environmental exposure controls**
Environmental manager must be informed of all major releases.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

**Appearance**
- **Physical state**
  Solid.
- **Form**
  Solid. Paste.
- **Colour**
  Not available.
- **Odour**
  Not available.
- **Odour 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.

Vapour pressure
Not available.

Vapour 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.

Explosive properties
Not explosive.

Oxidising properties
Not oxidising.

9.2. Other information
No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Material is stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid
Contact with incompatible materials.

10.5. Incompatible materials
Strong oxidising agents.
Incompatibility is based strictly upon potential theoretical reactions between chemicals and may not be specific to industrial application exposure.

10.6. Hazardous decomposition products
No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information
Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation
No adverse effects due to inhalation are expected.

Skin contact
Causes skin irritation.

Eye contact
Causes serious eye irritation.

Ingestion
May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

11.1. Information on toxicological effects

Acute toxicity
Not known.

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory sensitisation
Due to partial or complete lack of data the classification is not possible.

Skin sensitisation
Due to partial or complete lack of data the classification is not possible.

Germ cell mutagenicity
Due to partial or complete lack of data the classification is not possible.
Carcinogenicity

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.) 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) 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. Due to partial or complete lack of data the classification is not possible.

IARC Monographs. Overall Evaluation of Carcinogenicity

<table>
<thead>
<tr>
<th>Compound</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cristobalite (CAS 14464-46-1)</td>
<td>1 Carcinogenic to humans.</td>
</tr>
<tr>
<td>Quartz (SiO2) (CAS 14808-60-7)</td>
<td>1 Carcinogenic to humans.</td>
</tr>
</tbody>
</table>

Reproductive toxicity

Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity

Due to partial or complete lack of data the classification is not possible.

Aspiration hazard

Due to partial or complete lack of data the classification is not possible.

Mixture versus substance information

No information available.

Other information

Not available.

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

12.2. Persistence and degradability

No data is available on the degradability of any ingredients in the mixture.

12.3. Bioaccumulative potential

No data available.

Partition coefficient

n-octanol/water (log Kow)

Not available.

Bioconcentration factor (BCF)

Not available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Not a PBT or vPvB substance or mixture. Not available.

12.6. Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste

Not available.

Contaminated packaging

Not available.

EU waste code

Not available.

Disposal methods/information

Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
SECTION 14: Transport information

ADR
14.1. - 14.6.: Not regulated as dangerous goods.

RID
14.1. - 14.6.: Not regulated as dangerous goods.

ADN
14.1. - 14.6.: Not regulated as dangerous goods.

IATA
14.1. - 14.6.: Not regulated as dangerous goods.

IMDG
14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/76 and the IBC Code
Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations
Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended
Not listed.
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed.
Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.
Not listed.
Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA
Not listed.

Authorisations
Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended
Not listed.

Restrictions on use
Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Silicic acid, sodium salt (CAS 1344-09-8)
Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.
Cristobalite (CAS 14464-46-1)
Quartz (SiO2) (CAS 14808-60-7)

Other EU regulations
Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
Not listed.

Other regulations
The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations
Follow national regulation on the protection of workers from the risks of exposure to carcinogens and mutagens at work, in accordance with Directive 2004/37/EC.

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out.
SECTION 16: Other information

List of abbreviations Not available.

References Not available.

Information on evaluation method leading to the classification of mixture Not available.

Full text of any H-statements not written out in full under Sections 2 to 15

H315 Causes skin irritation.
H319 Causes serious eye irritation.

Revision information

SECTION 1: Identification of the substance/mixture and of the company/undertaking: Uses advised against
SECTION 2: Hazards identification: Supplemental label information
Composition / Information on Ingredients: Disclosure Overrides
SECTION 6: Accidental release measures: 6.3. Methods and material for containment and cleaning up
SECTION 7: Handling and storage: 7.1. Precautions for safe handling
SECTION 8: Exposure controls/personal protection: Exposure guidelines
SECTION 9: Physical and chemical properties: Form
SECTION 11: Toxicological information: Inhalation
SECTION 13: Disposal considerations: Disposal methods/information
GHS: Classification

Training information Not available.

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.