

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : **Kalsi®**
Synonyms : **KalsiCeiling, KalsiPartition, KalsiClad, KalsiPlank, KalsiFloor, KalsiDeck**

Intended product use : Building Applications / Building Material / Construction.

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2. COMPOSITION / INFORMATION ABOUT COMPONENT

Description : Fibre-cement boards or Cellulose-cement boards or Calcium-silicate boards, from 3.5mm to 20mm of thickness for various applications in construction industry (e.g. ceiling, partitions, cladding/siding, facades, flooring etc)

Chemical characterization:

This product is a manufactured article, not a substance nor a preparation.
 This product is manufactured from a combination of Portland cement (calcium silicate hydrate), organic reinforcement fibers (cellulose fibers), selected quartz and water.

| Ingredient | Identification | Content |
|---|-----------------|----------|
| Portland Cement | CAS: 65997-15-1 | 30 – 60% |
| Crystalline Silica (Quartz) | CAS: 14808-60-7 | 30 – 60% |
| Natural Organic Fiber (Cellulose) | CAS: 9004-34-6 | < 15% |
| Other non-hazardous ingredients (Fillers) | Not Available | < 15% |

All **Kalsi** boards are produced without using any asbestos (such as chrysotile, amosite, crocidolite or any other kind of asbestos).

3. HAZARD IDENTIFICATION

Indication of the hazards:

The installed product in its final application: no hazards known.

When machining (drilling, cutting, sanding, etc.) the product, airborne dust can be released:

- Excessive inhalation of dust may cause irritation of the airways.
- Eye contact with dust may lead to transient eye irritation or inflammation.
- Prolonged skin contact could lead to irritation for sensitive persons.
- See section 11 for detailed information

Specific risk information for humans and environment:

See sections 7 and 8.

4. FIRST AID MEASURES

- Inhalation : Move to a ventilated area and fresh air
 - Ingestion : Drink plenty of water
 - Skin contact : Rinse skin thoroughly it with water.
 - Eye contact : Do not rub the eye, flush copiously for at least 15 minutes.
- If symptoms such as eye irritation or inflammation persists, seek medical advice

5. FIRE FIGHTING MEASURES

- Flash point : Non-combustible.
- Flammable limits : LEL: Not applicable,
UEL: Not applicable.
- Extinguishing media : Not applicable.
- Special firefighting procedures : None.
- Unusual fire and explosion hazards : None.

6. ACCIDENTAL SPILL / RELEASE MEASURES

- Methods for cleaning up : Shovel up small pieces.
Dampen down any dust before putting into open skips

7. HANDLING AND STORAGE

Handling:

Instructions for handling and machining **Kalsi** boards:

- Dust, generated during machining and processing must be exhausted and the regulatory occupational exposure limits for total and respirable dust must be respected.
- Work in well ventilated area.
- Use tools with appropriate dust exhaust system.
- When total dust concentration is higher than occupational exposure limit (refer to local regulations) or when dust extraction equipment is not available, use of individual respiratory protective equipment is obligatory.
- Collect dust with a vacuum cleaner; hose down or soak with water before sweeping up.

Storage:

Pallets should be stored on a flat surface, in a dry, covered, frost proof and well-ventilated area. During transport, the products should be covered.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

- When machining (drilling, cutting, sanding etc) boards, respect Occupational Exposure Limits for inhalable and respirable dust and for respirable quartz dust.
Check the latest Occupational Exposure Limits (OEL) for airborne contaminants that are applicable in your country.
- Engineering controls : Ensure vacuum dust exhaust with correct filter when using motorized machining tools.
- Personal protection : Avoid breathing dusts, avoid eye and skin contact, and wear personal protective equipment's appropriate to the task.
- Respiratory protection : Use approved individual respirators (e.g. disposable P2 types) whenever OEL are foreseen to be exceeded.
- Eye protection : Use safety goggles whenever tools are used and dust is produced.
- Skin protection : Use working clothes and gloves to protect against mechanical injury and direct skin contact.

9. PHYSICAL AND CHEMICAL CHARACTERISTICS

- Appearance : Off-white.
- Delivery form : Rigid, self-supporting board.
- Odor : None.

Important safety parameters:

| | | |
|---|---|---------------------------|
| Boiling point | : | Not applicable. |
| Melting point | : | Not applicable. |
| Flash point | : | Not applicable. |
| Flammability (solid/gas) | : | Not applicable. |
| Auto flammability | : | Not applicable. |
| Explosive properties | : | Not applicable. |
| Oxidizing properties | : | Not applicable. |
| Vapor pressure | : | Not applicable. |
| Average density | : | 1.30 Kg/dm ³ . |
| Solubility: | | |
| - Water solubility | : | Insoluble. |
| - Fat solubility | : | Not applicable. |
| pH value | : | 12 – 13. |
| Partition coefficient (n-octanol/water) | : | Not applicable. |
| Viscosity | : | Not applicable. |

10. STABILITY DAN REACTIVITY

- Chemical Stability : Stable under recommended condition of storage.
- Incompatibility (materials to avoid) : Strong acids (e.g. hydrofluoric acid)
- Hazardous reaction : Hazardous polymerization is not expected to occur

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary:

Low toxicity. Under normal conditions of use, adverse health effects are not anticipated.

As with most types of inorganic and/or organic quartz containing products, non-specific to **Kalsi** products, such as concrete and clay, this product will also release dust containing quartz particles when it is mechanically machined (cutting, sanding, drilling).

Hazards are related to the generation of dust produced during machining. This risk will be minimal if correct working practices are observed and applied i.e. with use of dust extraction, appropriate protective equipment and well-ventilated working environment.

No acute toxicity other than transient irritation of exposed mucosae (eyes, throat, airways) and skin upon prolonged contact.

Adverse health effects associated with silica, such as development of silicosis (lung fibrosis) are not anticipated unless chronic (i.e. prolonged and repeated) exposure to silica dust occurs. Crystalline silica is classified as carcinogenic to humans (IARC Group 1).

Inhalation:

Inhalation of dust can cause transient respiratory irritation as a result of mucous membrane irritation of the upper respiratory tract with over exposure.

The inhalation of quartz containing dust, in particular high concentration of fine (respirable) dust or over a prolonged period of time can lead to chronic inflammation of the airways (industrial bronchitis).

Avoid the inhalation of dust by using machinery with dust extraction.

Guarantee adequate ventilation on the work floor.

Avoid the contact with the eyes and skin and avoid inhalation of the dust by wearing appropriate personal protection gear (safety goggles, protective clothing and dust mask).

Eye:

Low to moderate irritant. Contact with dust may result in mechanical irritation. However, due to product form (solid), contact with dusts is not anticipated unless product is cut or damaged.

Skin:

Low irritant. Prolonged or repeated contact may result in mild irritation due to mechanical action.

Ingestion:

Ingestion is considered unlikely due to product form (solid).

12. ECOLOGICAL INFORMATION

Nothing to report.

13. DISPOSAL CONSIDERATION

- The product must be handled as building/ construction industry waste
- The product including the packaging to be disposed in accordance with local, state and government legislation for quartz containing waste and other described raw materials.

14. TRANSPORT INFORMATION

Road transport : **Kalsi** boards are not classified as dangerous.
Inland shipping transport : **Kalsi** boards are not classified as dangerous.
Sea shipping transport : **Kalsi** boards are not classified as dangerous.
Air transport : **Kalsi** boards are not classified as dangerous.

15. REGULATORY INFORMATION

Kalsi product is a manufactured article, not a substance nor a preparation.
Therefore, the EU Directive on classification and labelling 67/548EEC is not applicable.

16. OTHER INFORMATION

The recommendations for use and installation of the **Kalsi** boards of various building systems, have to be followed as indicated in the Technical Manual, or in specifications.

The health and safety information contained herein is believed to be accurate and correct based on our current knowledge at the date of issue and no liability can be accepted for any loss, injury or damage resulting from its use. It is intended as a guide for the safe handling, storage and use under normal conditions, but does not necessarily refer to the requirements of a customer when further advice should be obtained.

This data sheet and the information it contains is not intended to supersede any terms or conditions of sale and does not constitute a specification. Nothing contained herein is to be construed as a recommendation for use in violation of any patent or applicable laws or regulations.

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