

WARNING

WORKING SAFELY WITH CONCRETE AND QUARRY PRODUCTS

Safety Data Sheets for our products are available on request

Health Effects

Exposure to wet concrete, cement dust or dust from certain quarry products can cause ill health through skin contact, eye contact, or dust inhalation. The risk of injury or sickness depends how long and how much a person is exposed to and individual sensitivity.

Hazards associated with wet concrete include prolonged contact with skin, eyes etc. which can lead to corrosive burns from lime (calcium oxide) or allergic skin reactions as a result of exposure to very small amounts of chromium contained within the cement or skin abrasions. These injuries can require significant medical treatments and take a long time to heal.

Respirable Crystalline Silica Dust (RCSD) may be present in quarry products or released from solid concrete (when it is crushed, cut, drilled, sawed, routed, chased, sanded, broken up or ground). A high-risk crystalline silica material is defined as a substance that contains greater than 1% crystalline silica. The inhalation of excessive amounts of RCSD can cause irreversible lung damage and lead to significant illness that can be fatal.

Short Term (Acute) exposure can result in:

- Irritation of respiratory tract causing coughing and sneezing. Pre-existing upper respiratory and lung diseases including asthma and bronchitis may be aggravated.
- Watering/redness of the eyes or aggravation of previous eye conditions.
- Irritation of the skin and abdominal pain if swallowed.

Long Term (Chronic) exposure can result in:

- Silicosis (Irreversible Pulmonary Fibrosis) - scarring of the lung. This permanently reduces a person's ability to inhale oxygen and exhale carbon dioxide, leading to breathing impairment.
- Increased risk of bronchitis, pneumonia, lung cancer and tuberculosis.
- Increased risk of kidney damage, scleroderma, and other auto immune disorders.
- Irritant contact dermatitis (a rash), which can become chronic and infected.

User Duty of Care

Employers have an obligation under the *Occupational Health and Safety Act 2004* to ensure the health and safety of people so far as reasonably practicable. This includes, but is not limited to:

- Providing and maintaining safe systems of work.
- Giving your employees the necessary information, instruction, training, or supervision to enable them to do their work in a way that is safe and without risks to health.

Employees have an obligation to:

- Take reasonable care for your health and safety in the workplace and take reasonable care for the health and safety of others who may be affected by what you do or don't do.
- Cooperate with your employer about any action they take to comply with the OHS legislation.

Appropriate risk assessments must be conducted when using our concrete and quarry products to ensure the safety of your employees, yourself, and others in the community.

Minimum Required Personal Protective Equipment

To protect yourself from quarry products, users should wear:

- Respiratory protection that conforms to AS/NZS 1716 and used in accordance with AS/NZS 1715.
- Riggers gloves.
- Overalls or long sleeves and full-length trousers.
- Suitable eye protection complying with AS/NZS 1337.

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Additional protection for crystalline silica dust, users should wear:

- A powered air purifying respirator (PAPR) if a facial seal cannot be achieved, e.g. facial hair, medical condition or where high levels of dust are encountered.
- Coveralls (that are compliant to AS/NZS 2161). Ensure you do not contaminate the home environment with dusty work clothes and shoes. Do not shake out work clothing before laundering. Clothes should be washed regularly and separately from other clothes. Clean coveralls should be worn at every shift and removed before taking off dust mask.

Additional protection for wet concrete, users should:

- Wear alkali-resistant gloves conforming to AS2161.
- Wear overalls or long sleeves and full-length trousers, with sleeves pulled down over gloves and pants tucked inside boots, duct-taped at the top to keep concrete out.
- Wear steel toe gumboots or similar, to act as a barrier for feet and legs when undertaking a pour (as required).
- Not wear contact lenses when handling cement or concrete products without approved safety eyewear.

WHERE CONTACT OCCURS, WHETHER DIRECTLY OR THROUGH SATURATED CLOTHES,
IMMEDIATELY WASH THOROUGHLY.

Hazard Controls

- Work in ways that minimise the dust released.
- Fully enclose dusty processes.
- Use exhaust ventilation or dust collection equipment to remove dust from the operator.
- Use tools fitted with dust extraction devices.
- Never dry-cut concrete products. (e.g., use tools fitted with a wet dust suppression attachment)
- Fit operator cabins with an effective HEPA air filtration system.
- Ensure windows and doors of equipment are always closed.
- Wet down dusty material, work areas and processes.
- Do not enter a cabin with soiled clothing or footwear.
- Do not dry sweep cabins or used compressed air. Wet wipe or approved HEPA rated vacuum only.
- Do not smoke when exposed to RCSD.
- Establish exclusion zones and physical barriers to separate other workers from the area of work.
- Establish job rotation schedule so the same workers are not continuously exposed to silica dust.
- Develop written rules and policies for working with crystalline silica products.
- Develop policies on the storage, cleaning and maintenance of PPE and equipment used when working with crystalline silica.
- Provide training on working with crystalline silica products.
- Plan timing of task dependent on weather conditions (i.e., when it isn't windy)
- When kneeling on fresh concrete, use a dry board or waterproof kneepads to protect knees from water that can soak through fabric.
- Remove jewellery such as rings and watches because wet concrete can collect under them.
- Collecting solid waste and placing in a covered container.

First Aid

Skin contaminated with cement or concrete should be washed with cold running water as soon as possible. Open sores or cuts should be thoroughly flushed and covered with suitable dressings (cement is extremely alkali and dries the skin, so use of a suitable moisturiser on external skin may be required). Get medical attention if discomfort persists. Contaminated eyes should be washed with saline solution for at least 15 minutes before the affected person is taken to hospital. If swallowed, rinse mouth with water. Do not induce vomiting. If dust is inhaled, move immediately out of the dusty area and into fresh air. Seek medical attention for persistent irritation of the skin, eyes, respiratory or gastrointestinal system.