

The chromium (VI) legislation for cement

Health and safety - Cements, chromium (VI) and reducing agents

Why does cement contain chromium?

The chromium in cement comes from primarily from some of the naturally occurring raw materials used in the manufacture of cement.

What does chromium do?

When cement is mixed with water some of the chromium dissolves (like salt in water) and can cause allergic dermatitis if it comes into contact with your skin for prolonged periods of time.

What do reducing agents do when added to cement?

When ferrous sulfate, stannous sulfate, or other reducing agents, are added to cement in sufficient quantity they prevent the chromium from dissolving in water thereby removing the risk of allergic dermatitis.

Are reducing agents being added to cements in the UK?

BCA Member Companies have been adding reducing agents, where necessary, to cements since January 2005. This has required the installation of dosing equipment at all their cement works.

Do reducing agents make cement safe enough to handle without personal protective equipment (PPE)?

Reducing agents do not make cement safe to handle without PPE. Cement, when wet, can cause two types of dermatitis, *allergic* dermatitis and *irritant* dermatitis. Reducing agents only protect against allergic dermatitis. Irritant dermatitis is much more common than allergic dermatitis. It is caused by caustic chemicals in wet cement that irritate and inflame the skin. These caustic chemicals can also cause severe skin burns. The only way to protect against these risks is to prevent skin contact. The same PPE is, therefore, required for handling wet cement now that reducing agents have been introduced as was previously required. Irrespective of the introduction of reducing agents, correct PPE would ensure users do not suffer allergic dermatitis, irritant dermatitis or burns. In light of the current level of dermatitis and burns, employers are urged to review their existing safety precautions and to provide correct PPE for their employees.

Where can I find out more?

For product-specific information, contact your supplier/manufacturer directly.

For generic information, contact: M G Taylor at BCA, Tel: 01276 608716, mtaylor@bca.org.uk

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