

The chromium (VI) legislation for cement Implementation

The Chromium (VI) Directive

The EU Directive, 2003/53/EC, restricting the marketing and use of cement and cement-based preparations, where they contain when hydrated, more than 0.0002 % (2 ppm) chromium (VI) of the dry weight of cement, was published in the Official Journal of the European Union on 17 July 2003.

The provisions in this EU Directive have now been transposed into national legislation in Member States within the European Economic Area (EEA). Implementation in the UK is via the COSHH and CHIP regulations and these national provisions have applied since 17 January 2005. Compliance with the legislation is mandatory for all cement manufacturers, and formulators/suppliers of cement-based preparations, who produce, or import such products, into the EEA.

BCA Member Companies' response

In order to comply, BCA Member Companies have invested in new equipment, modifications to their processes and addition of a chemical reducing agent (e.g. ferrous sulfate hydrate or stannous sulfate) in sufficient quantity to reduce, on addition of mixing water, chromium (VI) to a level in the cement below 2 ppm. All their cements, with the exception of white cements which contain less than 2 ppm naturally, are reduced whether supplied in bulk or in bags. The derogation from the limit on chromium (VI) provided in the legislation for use of cements in ...“*controlled, closed and totally automated processes etc*” ... (i.e. processes in which there is no possibility of contact with the skin) is thought to be impracticable at the operational level and is unlikely to be adopted in the UK. BCA Member Companies now label their packaging and delivery documents, where necessary, with information on the packing/dispatch date, storage conditions and the storage period appropriate to maintaining the activity of any reducing agent and to keeping the content of soluble chromium (VI) below the 2 ppm limit. Since July 2002, cements (and preparations) that contain more than 2 ppm soluble chromium (VI) have had to bear the following inscription: “*Contains chromium (VI). May produce an allergic reaction*” unless the cement was already classified and labelled as a sensitizer with the risk phrase R 43. BCA Member Companies’ cements will continue to bear this risk phrase even though it will no longer be a legal requirement for compliant cements. Its continued use will, however, indicate that compliant cement could still contain a small (no more than 2 ppm) amount of soluble chromium (VI) which, in the absence of evidence to the contrary, might pose a risk to some susceptible users.

What are the consequences for customers and users?

The technical and logistical consequences of the legislation vary with the type of customer and product use. These issues are the subject of other Fact Sheets in this series and of product-specific information issued directly by suppliers and manufacturers.

Health and safety

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. The same PPE is required for handling wet cement now that reducing agents have been introduced as was previously required. Correct PPE would ensure users do not suffer allergic dermatitis, irritant dermatitis or burns.

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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