

MPA Cement Fact Sheet 10.1

## Chromium (VI) and cement Legislation

### REACH Regulation

When the REACH [1] Regulation [*Registration, Evaluation, Authorisation (and Restriction) of Chemicals*] came into force on 1 June 2007, clause 47 of its *Annex XVII* replaced/superseded the cement-related chromium (VI) provision in former EU Directive 2003/53/EC [2]. The legislative provision, however, remains unchanged and continues to restrict 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.

Compliance with REACH is obligatory for all cement manufacturers, and formulators/suppliers of cement-based preparations, who produce, or import such products, into the European Economic Area (EEA).

### MPA Cement Member Companies response

In order to comply with the Cr(VI) legislation, MPA Cement's Members invested in new equipment, modifications to their processes and addition of a chemical reducing agent (typically, ferrous sulfate hydrate) 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 chemically 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) was thought to be impracticable at the operational level and has not been adopted in the UK. MPA Cement 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.

In addition, Member Companies' cements continue to bear a risk phrase derived from earlier legislation: “*Contains chromium (VI). May produce an allergic reaction*” even though this is no longer a legal requirement for REACH-compliant cements. Its continued use indicates, however, 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 this legislation vary with the type of customer and product use. These issues are the subject of other Fact Sheets in this series and in product-specific information issued directly by suppliers and manufacturers.

## Health and safety

Reducing agents do not make cement safe to handle without PPE (personal protective equipment). Cement, when wet, can cause two types of contact dermatitis, *allergic* dermatitis and *irritant* dermatitis. Reducing agents only protect against allergic dermatitis. The same PPE is required for handling wet cement since reducing agents were 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: C McCague, Tel: +44(0)20 7963 8000, [colum.mccague@mineralproducts.org](mailto:colum.mccague@mineralproducts.org).

## References and further reading

[1] Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) establishing a European Chemicals Agency amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=oj:l:2006:396:0001:0849:en:pdf>

[2] SUPERSEDED - Directive 2003/53/EC of the European Parliament and of the Council of 18 June 2003 amending for the 26th time Council Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations (nonylphenol, nonylphenol ethoxylate and cement)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0053:en:NOT>

MPA Cement Fact Sheets: 10.2, 10.3, 10.4, 10.5, 10.6, 10.7 and 10.8

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