

MPA Cement Fact Sheet 10.8

Chromium (VI) and cement Shelf-life expired cement* - chromium (VI)-related

MPA Cement advice on the options available to Member Companies' customers

Introduction

The introduction of legislation (now Clause 47 of *Annex XVII* of the REACH Regulation) which regulates cement and cement-containing preparations for their water-soluble chromium (VI) content, and the advent of the 'shelf-life' concept for cement, has made it more likely than before that cement may be discarded as waste. At expiry of the 'chromium (VI)-related shelf-life' (declared storage period), or earlier if a reduced cement has not been stored as recommended by the manufacturer, the cement may become a waste because the 'holder' will be unaware of, or be unable to apply, the several alternatives available. This Fact Sheet describes the options under the chromium (VI) legislation.

Options available for shelf-life expired cement under the chromium (VI) legislation

At the point that the shelf-life expires, reduced cement may be discarded as waste on the presumption that it no longer complies with the chromium (VI) legislation and therefore can neither be legally used nor further supplied on the market [except into a 'derogated process' (see below)]. Discarding such shelf-life expired cement as waste need not be the only option because, ***under the responsibility of the customer***, reduced cement could still be used legally or supplied onwards with the status of a 'product', where one of the following conditions applies:

- determination, by testing, of the water-soluble chromium (VI) content reveals that the cement still meets the regulatory limit of 0.0002 % (2 ppm), however, a new shelf-life/storage period would need to be declared;
- the cement (or cementitious mix) is treated with an additional reducing agent to control the water-soluble chromium (VI) content to meet the regulatory limit, also confirmed by testing, again a new shelf-life/storage period would need to be declared;
- the process in which the shelf-life expired cement is to be used has been 'derogated', that is, has been declared to be "*controlled, closed and totally automated... and in which there is no possibility of contact with the skin*" possibly receiving either an official 'derogation', as defined in the chromium (VI) legislation, or an official 'exemption', from the Health and Safety Executive (HSE).

* Any cement based on Portland cement clinker

Disposal to landfill of shelf-life expired reduced cement

In the event that shelf-life expired reduced cement is discarded as waste and disposal to landfill is the only realistic option, the Environment Agency advises that, because the cement product is classified as an irritant when handled and in use, when discarded cement should therefore be classified as hazardous waste for the purposes of disposal. This is contrary to an expert opinion sought by the former BCA, now MPA Cement. Users should, however, adopt a precautionary approach and follow the Environment Agency's recommendations.

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

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