



Hexavalent Chromium

Some individuals are particularly sensitive to Chromium (Cr) as it exists in cement-based construction products. Chromium ionic species exist in multiple oxidation states, but of particular concern here is what is referred to as hexavalent chromium in the +6 oxidation state [represented as Cr(VI)], and more generically as “chromate”. More specifically this is chromium trioxide and commonly the largest commercial usage is present in chromic acid used in electroplating. Cr(VI) finds its presence in cement due to oxidation of Cr(III) in the clinker during the kiln burn and to a lesser extent from the kiln lining and the grinding process.

Five Star® cementitious grouts and concrete repair materials have trace amounts of these hexavalent chromium compounds due to the presence of portland cement which typically contains about 0.5 ppm of CR(VI). Individuals working with these products are advised to wear Personal Protective Equipment (PPE) to avoid contact with portland cement which may affect sensitized individuals to dermatitis.

Refer to the product specific Five Star® Safety Data Sheet for appropriate PPE for eye/face, hand, skin/body, and respiratory protection as well as additional health and safety information.

For information 1-800-243-2206 ▪ [FiveStarProducts.com](https://www.FiveStarProducts.com)

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