

Ultra-Low Level Hexavalent Chromium Workplace Monitoring

Hexavalent chromium (CrVI) compounds are commonly used in the chemical industry in pigments, metal plating and chemical synthesis, as both ingredients and catalysts. CrVI can be produced during welding operations even if the chromium was originally present in another valance state.

Health Effects

There are many health effects associated with workplace exposure to CrVI, including lung cancer, asthma, bronchitis and damage to nasal cavity, skin, and eyes. To help employers comply with the requirements of EUDirective2004/37 and the terms of the REACH authorisations, monitoring is required to measure the workers exposure.

Monitoring and Sampling

Personal monitoring is taken from the breathing zone, this aims to evaluate how much CrVI the worker is exposed to during their shift. The samples are taken on treated filters and analysed by Ion Chromatography. The LOD needs to be sufficiently sensitive to achieve $<1\mu\text{g}/\text{m}^3$ or lower ($0.025\mu\text{g}/\text{m}^3$ if technically possible).

Marchwood offer the supply and analysis of the pre-treated filters, in line with BS ISO 16740:2005, with a reporting LOD of $0.01\mu\text{g}$ ($0.02\mu\text{g}/\text{m}^3$ on a 480L sample).



Pre-Treated Filter

10 working day turnaround - 5 day Fast-Track option at an additional cost

For more information on Marchwood's services, or to request a quotation, please visit our website or contact us on the details provide below:



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