

Technical Information Bulletin

New Product Release

Lead chromate and alternative

Lead chromate $PbCrO_4$ CAS no. 7758-97-6 has been used for many years as a reagent for the absorption of sulphur dioxide, particularly in analysers manufactured by Elementar.

It is now known that lead chromate presents some serious health issues:



“Due to containing both lead and hexavalent chromium, lead(II) chromate is profoundly toxic. Lead(II) chromate is a poison, and can be fatal if swallowed or inhaled. Lead(II) chromate is a known carcinogen, developmental toxicant, and reproductive toxicant. It is also suspected that lead(II) chromate is a cardiovascular or blood toxicant, immunotoxicant, kidney toxicant, neurotoxicant, respiratory toxicant, and a skin toxicant or sense organ toxicant.”

Under the European REACH regulations lead chromate is classified as a “SVHC” (Substance of Very High Concern) meaning that its general use is due to be banned (no specific date has been set so far).

Disposal of “spent” reagent needs great care and is very costly.

In view of the safety considerations for customers and employees Elementar Microanalysis no longer offers this substance.

Alternative

The most suitable replacement for sulphur dioxide removal is silver wool. This option is also recommended by Elementar. Elementar Microanalysis offers a prepacked combustion tube suitable for the Vario ELIII, Vario EL Cube and Vario Micro.

Part Number	Product Description	Pack Size
X2506	Prepacked N/NC/CHN Reaction Tube Vario EL3/Cube/Micro Cube	1

