

Chromium trioxide

Regulation (EC) No 1907/2006 (REACH)

Use of chromium trioxide (= hexavalent chromium / Cr VI)

Oras Group is a “down-stream user” of chromium trioxide (= hexavalent chromium / Cr VI), applying this substance in the electroplating processes (galvanics) for faucets, shower systems, and accessories. This substance is used for electroplating base materials like brass, zinc and plastic which are covered with metallic layers to create long-lasting, corrosion and wear resistant surface. As final layer the chrome (Cr “0”) surface creates a surface quality which Oras Group is world renowned for.

Chromium trioxide is listed in Annex XIV to REACH and may only be used under an authorisation. Oras Group uses chromium trioxide as a downstream user, in accordance with the authorisations granted to the upstream applicants in its supply chain under the REACH authorisation system, and operates within the conditions of those authorisations; downstream use is notified to ECHA as required.

Risks

Risks associated with the use of chromium trioxide at Oras Group are specifically limited to the electroplating production process. During the electrolytic process in the chrome bath a metallic chrome layer (Cr “0”) is produced from a liquid chromium trioxide solution (chromic acid / Cr VI). The finished chrome surface is metallic chromium (Cr “0”), not hexavalent chromium, so end users of faucets, shower systems and accessories are not exposed to Cr VI through normal use of the product.

A second application of chromium trioxide (Cr VI) is an etching production step for plastics as a base material, where chromic acid is being used as a pre-production step prior to creating the metal layers. In this case extended rinsing removes chromic-acid residues from the surface before the metal layers are deposited. The water used in the cleaning and electroplating processes is treated in complex treatment processes before leaving the production facilities.