

Removing Chromium Trioxide from the Galvanizing Process

Customer Information



Excellence in Galvanizing

WEDGE

www.wedge-galv.co.uk

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Why we used Chromium Trioxide (Chromium VI) in the galvanizing process?

Chromium VI was used in the passivation process during galvanizing.

The Chromium Trioxide created a protective surface on the galvanized coating that kept the surface bright and shiny for up to 12 weeks and prevented wet storage stain on the galvanized coating for a short period of time after galvanizing.

Why we removed Chromium VI?

The European Union's REACH legislation banned the use of Chromium Trioxide in most manufacturing processes (including galvanizing) by September 2024.

The supplier of the chemical for the UK communicated to the whole galvanizing industry that to avoid being left with stocks post September 2024, they would not supply the chemical beyond February 2024.

Finding an alternative

There is no direct equivalent to Chromium Trioxide. Having researched the market thoroughly (both in the UK and globally), there was one 'stand-out' product which operates in the same way using existing plant and equipment. This is a non-Chrome alternative manufactured by the same supplier and fully satisfies the September 2024 legislation.

Wedge Group Galvanizing trialled this non-Chrome product at several of our plants from 2020 and worked to optimise all the parameters to achieve the most consistent and aesthetic finish possible whilst accepting there are minor differences over the existing Chromium Trioxide chemical. These differences are purely cosmetic and on certain articles (heavy articles) can be seen as a faint striping effect and on all articles, a slight haze / satin appearance to the finished galvanizing coating.

Our journey

Due to our research and investment in the alternatives, Wedge Group Galvanizing was able to transition all of our plants to the new non-Chrome passivation by March 2024.

The outcome

You may observe slight difference in the appearance, such as a slight haze or satin appearance to the finished galvanizing coating or on heavy articles a faint striping effect.

We continually invest in our plants and equipment to ensure all our plants are designed and equipped to set industry-leading standards for sustainability and low environmental impact.

If you have any concerns, please contact your local plant.

Use the QR code to
find the plant
closest to you.



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