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## Explanatory note to a review report

**Legal name of authorisation holder(s):** Tyco Electronics UK Ltd

**Authorisation number:** REACH/18/6/18 (12UKREACH/18/6/18)

**Submitted by:** Tyco Electronics UK Ltd

**Substance:** Chromium trioxide  
EC No. 215-607-8, CAS No. 1333-82-0

**Use title:** Industrial use of a mixture containing hexavalent chromium compounds in conversion coating and passivation of circular and rectangular connectors in order to meet the requirements of international standards and special requirements of industries subject to harsh environments

**Use number:** 2

**Date** 17 March 2023

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## **1. The scope of the use**

The scope of use has not changed since the original application for Authorisation.

## **2. Chemical Safety Report (CSR)**

The Chemical Safety Report has been updated to contain only the data for the Hastings site belonging to Tyco Electronics UK Ltd.

The exposure scenarios as described in the original application for Authorisation remain applicable. The volume of material has been reviewed and updated to reflect current usage.

Compliance with the monitoring arrangements specified in Article 3 of the Commission's decision is demonstrated in Section 9.1.1.2 (Tonnage information/Number of worker exposed).

## **3. Analysis of Alternatives (AoA)**

Since the original application for Authorisation, Tyco Electronics UK Ltd has continued to investigate alternatives.

Alternatives available to passivate the plated surfaces are trivalent chromium-based chemistries. These passivates require the use of a topcoat (post passivate application) to give consistent colour and wear resistance of the passivate film. These topcoats render the coating non conductive. The connectors manufactured by Tyco Electronics UK Ltd require conductivity across the surface and between mating halves to ensure grounding or electrical/RFI shielding.

Alternative plating finishes (such as Nickel PTFE) are available. However, a significant portion of the products supplied by the Hastings site are designed to meet customer or external specifications, which do not permit alternative finishes to be used.

These alternatives were assessed and deemed unsuitable for use based on technical performance, customer requirements and industry/military standard requirements.

Section 3 contains details of the assessment of these alternatives.

## **4. Socio-economic Analysis (SEA; if relevant)**

The Socio-economic Analysis report has been reviewed and updated.