

COMMENTS AND RESPONSE TO COMMENTS ON AUTHORISATION

Substance name: Chromium trioxide

EC number: 215-607-8

CAS number: 1333-82-0

Broad information on use applied for (title): Electroplating of different types of substrates using Chromium Trioxide to achieve functional surfaces with high durability and a bright or matt silvery appearance for sanitary applications

Consultation number: 0277-01

Applicant name: Rubinetteria Ritmonio Srl

Consultation period: 17/08/2022 - 12/10/2022

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Reference number and date:	Submitter:	Alternative:						Attachments:
		Type	Generic name	EC Number	CAS Number	Description of technical alternative	Classification and Labelling	
Ref.No: 1385 Date: 2022/10/12 Type of comment:* The comment provides information that is generally not in support of the application	Affiliation: BehalfOfAnOrganisation Type/Role in the supply chain: Non-governmental organisation (NGO) Name of org/company: ChemSec Country: Sweden					several proposals		Comment_1385_Attachment.doc
Applicants' response:								
[Insert text here]								

As indicated in the AoA of RUBINETTERIE RITMONIO, all key functionalities deriving from the use of the chromium trioxide (corrosion resistance, chemical resistance, colour consistency, longevity) are required for products in the RUBINETTERIE RITMONIO' portfolio and for the only use applied for. All products are accessories for the sanitary sector (bathroom, kitchen and wellness), such as: taps, basin mixers, bidet mixers, bath groups, shower groups, spouts, mixers, shower accessories, built-in shower heads, wall mounted shower heads, builtin thermostatic mixer, single level sink mixer, shower heads with fit for arm, shower arms, body sprays, sliding rails.

The advantages of the use of chromium trioxide in the coating process of these articles has made the use of this compound indispensable in sanitary industry, since it guarantees the excellent properties of the treated articles as mentioned before. The high Quality of the articles obtained with the use of chromium trioxide, as well as the high reliability and safe management of the process, give solidity to the chrome plating process based on chromium trioxide.

Regarding the availability of alternatives to chromium trioxide already on the market, the tests carried out (also by many other authorization applicants and authorization holders) over the years such as corrosion resistance and chemical resistance have shown that potential alternatives do not satisfy the technical and quality requirements as shown in RUBINETTERIE RITMONIO' dossier.

This was also confirmed in the ECHA' meeting " Workshop on implications of use of trivalent chromium in functional plating with decorative character" on Monday 10 October 2022. Although the trivalent chromium looks to be the most promising alternative currently available to hexavalent chromium in functional plating with decorative character, it was confirmed that it requires a high volume of borates (SVHC, reprotoxic cat. 1B) during the production process. An alternative shall be considered as suitable, when the risks to human health and the environment are reduced, and it is available, technically and economically feasible.

Furthermore, the approach of asking customers if they would accept alternatives with other or less functionalities, this statement is not shared as involved customers are the heart of the company and without them one could not survive. Therefore their opinion is important because it is part of the process of inclusion of the supply chain independent of the number of years in which a technology has been developed because the customer only looks at the aesthetic and functional satisfaction of the product they buy and any variation of these features could generate aesthetic discontent, as revealed in the survey, which could push our customers to other suppliers.

In conclusion, at present the trivalent chromium coating cannot be considered a suitable alternative to the hexavalent chromium-based galvanic process both for the risks to human health and for the environment related to the implications coming from the use of borates, and the technical feasibility. The surface coatings obtained from Cr (III) based processes presents enormous technical deficits that occur in tests that use standard procedures for the analysis of the performance in the sanitary sector as shown in RUBINETTERIE RITMONIO' application.