

## **STEEL FOR PACKAGING – REACH COMPLIANT AND IN TRANSITION TO CHROME-VI FREE PASSIVATION**

### **1. WHAT IS THIS Q&A ABOUT?**

APEAL members and its value chain have taken proactively the initiative to ensure Steel for Packaging availability in Europe in response to REACH legislation

### **2. WHAT IS REACH?**

REACH stands for Registration, Evaluation, Authorisation (and Restriction) of Chemicals. It is a wide ranging and far reaching EU chemicals regulation that aims to ensure the protection of human health and the environment from the use of chemicals, while ensuring good functioning of the EU internal market.

### **3. WHY DO I NEED TO KNOW ABOUT REACH?**

One of the processes under REACH is the Authorisation process. This deals with the use of Substances of Very High Concern (SVHC).

A number of chromium VI compounds were added to the REACH Annex XIV that lists substances subject to Authorisation in Europe, with a Sunset Date of 21 September 2017.

Some of these substances are global standards for use in the passivation of tinned steel (ETP) and in electrolytic chrome coated steel (ECCS) and are used for this purpose all over the world.

### **4. WHAT IS AUTHORISATION?**

As noted above, Authorisation is one of the processes under REACH that deals with SVHC.

In this process, the EU aims to, after a specific date, ensure that uses of these SVHC substances in Europe is prevented, unless the use has been approved/authorised by the European Commission and the Member States. Practically, the use of chromium VI is thenceforward limited to specifically authorised uses in Europe.

### **5. A HAZARDOUS SUBSTANCE IS USED IN MAKING THE STEEL for PACKAGING, IS THERE ANY REMAINING ON THE PRODUCT?**

There is no chromium VI on the surface of the final tinned product or steel cans.

Indeed, in nature chromium exists in the vast majority of cases in other forms, like chromium III (trivalent chrome), which do not have the same properties, or cause the same health issues, as chromium VI.

Chromium VI is used under specific conditions and according to the highest safety and environmental standards in European Steel for Packaging production plants which means that chromium VI is converted to other forms of chromium, like chromium III.

## **6. HOW DOES THE AUTHORISATION PROCESS WORK?**

An application for continued use of an SVHC substance is prepared either individually or jointly by the manufacturers, importers (upstream) or users (downstream) of the substance. This is then submitted to the European Chemicals Agency (ECHA) who analyse the application and provide an Opinion based on scientific evidence.

*Two large*, upstream Authorisation dossiers were submitted for the use of chromium VI compounds (1 for chromium trioxide and 1 for sodium dichromate), covering uses in a multitude of different and diverse industries, like aerospace, defence, decorative coatings, etc. covering many hundreds of companies. Some of the uses in these applications are specific to Steel for Packaging.

In the Opinion from ECHA<sup>1</sup> they agreed with the information provided in the dossier, and recommended to the Commission that the requested Authorisation be granted for the Steel for Packaging uses. The review period sought was 4 years and this was reflected in the ECHA Opinion.

This Opinion was then passed onto the European Commission who had to prepare a Decision based on ECHA's work and their own analysis. This draft Decision then needed approval from the Member States in a committee called the REACH Committee.

Once the Member States vote, and agree with the Commission, then the Commission takes the Decision and publishes it as law in the EU.

## **7. YOU SAID THE SUNSET (BAN) DATE WAS THE 21<sup>ST</sup> OF SEPTEMBER 2017. HOW CAN YOU CONTINUE USING THIS IN THE STEEL for PACKAGING PROCESS?**

There is a mechanism within the REACH Authorisation process (Transitional Arrangements) that allows the continued use of an SVHC substance after the Sunset Date. APEAL members

---

<sup>1</sup> <https://echa.europa.eu/documents/10162/ab92f048-a4df-4d06-a538-1329f666727a> and <https://echa.europa.eu/documents/10162/a5f155f8-4bc9-65f0-9f9a-f55003a4ec8e>

are, consequently, allowed to continue to use chromium VI until a Decision has been made by the European Commission and agreed by the Member States.

Once a Decision has been made, then this will become EU law and the users of the SVHC substance must abide by any conditions set-out in the Authorisation Decision.

## 8. WHAT IS THE CURRENT SITUATION WITH THE DECISION?

The draft Decision from the European Commission agrees with the Opinion of ECHA and will grant a 4-years review period to begin from the date of adoption of the Decision, which would mean allowing their use in Steel for Packaging processes until at least Quarter 2 2024.

APEAL and its members are in contact with the Commission regularly for updates. In these updates, the Commission have repeatedly noted that the Steel for Packaging uses are accepted by all stakeholders as strong cases and will be granted Authorisation.

Taking the two large, upstream Authorisation dossiers mentioned in Q6 above; for chromium trioxide and 1 for sodium dichromate covering uses specific to Steel for Packaging, separately:

Sodium Dichromate:

- For the application covering sodium dichromate, there was a positive vote in the REACH Committee in September 2019. The corresponding Decision was published on the 21st of April 2020 and states that the **Review Period** (length of additional time authorised for the use of sodium dichromate) **runs until 14th of April 2024** for the steel for packaging use (ETP).

Chromium Trioxide:

- In relation to the application covering chromium trioxide, a positive vote was issued at the REACH Committee in February of 2019. Since then, unfortunately, some issues that manifested have delayed the finalisation of the process for this application:
  1. Some of the applicants indicated to the European Commission that, for reasons around BREXIT and the sale of some of their chemicals business units including those of the relating to hexavalent chrome, they wished to change the name of the Legal Entity that would receive the Authorisation.  
This initiated an administrative process at the European Commission as each Authorisation is granted per use, per substance and per identified Legal Entity. These issues have since been remedied.
  2. A court-case against a completely unrelated Authorisation application was decided in March of 2019. The judgement on this case has an impact on every Authorisation

application in the process, not only those covering Steel for Packaging (29 Authorisation applications).

For all of the above reasons the text of the Decision on chromium trioxide which included some uses for Steel for Packaging, needed to be changed. This is having an impact on the timescale for a Decision as it will require an update of the text of the draft meaning a re-vote on the draft Decision by Member States will occur. The overall impact of any change to the draft is not yet known as it has not been published by the Commission.

Unfortunately, at this time it is not possible to give an exact date at which this Decision will be made or the date for the end of the Review Period for the use of chromium trioxide.

What is clear, however, is that APEAL members are still legally able to use chromium VI compounds in their processes and are confident of a positive Decision in the future on uses covering Steel for Packaging. As a result, there should be no interruption in the supply of Steel for Packaging material.

The European Steel for Packaging industry will regularly update its customers on developments.

## 9. SO, WE CAN CONTINUE AS BEFORE?

No.

REACH Authorisation is difficult to achieve and is always time-limited.

The aim of the European Regulation is to ensure that the use of ALL SVHC substances is eventually stopped in the EU. The Authorisation process is designed to allow time for industries to transition to an alternative.

That is why APEAL members have invested heavily in developing an alternative process to the use of chromium VI on tinplate passivation.

The alternative to the current industry standard is a chrome-free passivation technology. This new technology is called **CFPA: Chromium-Free Passivation Alternative**. CFPA will be used by APEAL members in the future for tinplate passivation.

The Steel for Packaging and can-making industries are committed to only introduce fully qualified material to the market. The four years review period, when granted by the EU Commission, should be used for that purpose. All necessary resources have been allocated by

APEAL members to avoid market disruption and achieve a smooth transition to the alternative CFPA technology.

It is, therefore, incumbent on all stakeholders in the Steel for Packaging value chain to fully engage and ensure a seamless transition to the new technology.

## **10. APEAL MEMBERS ARE IN POSITION TO OFFER CHROMIUM FREE ALTERNATIVE**

All APEAL tin mills with tinning lines operating in the European Union are able to produce the chromium free alternative material.

In response to steel packaging customers' demand for equivalent surface qualities across the industry, APEAL's members' tin mills will continue to cooperate and share their CFPA-related technical work. APEAL members are also integrating CFPA into the relevant Euronorm for tinplate.

## **11. THE CHROMIUM FREE ALTERNATIVE (CFPA) IS FOOD CONTACT-COMPLIANT**

Compliance of CFPA with food contact regulations for human food in Europe is confirmed and it is in the process of being finalised in Mercosur and China. We have also obtained FDA Food Contact Notification for human food and dry infant formula to cover USA.

For more information, please contact the APEAL secretariat.