



Information circular for members of GSB International

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1 Chrom IV – Quo vadis?

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The prohibition on the use



The prohibition on the further use of Cr-VI-containing chemicals definitely enters. From the 21 September 2017 (the Sunset Date), the use of Cr-VI containing chemicals is banned or may not be placed into the market. This also applies for current stocks. Cr-VI-containing processes have to be switched off and the production shut down.

In order to make it possible to reach a continuous enhancement regarding the REACH-regulation, the applications for the authorization must be submitted until the 21. March 2016.

Authorization of the further use

The authorization or the approval, is the permission to use the material under specific conditions. The authorization can be done across the supply chain or the user submit an application.

Regarding the authorization across the supply chain, the manufacturer of Cr-VI-containing chemicals submits an application for authorization, which then forward to the buyers of the chemicals. This means that after receiving of the authorization, every customer, direct or indirectly, can use the chromic acid or Cr-VI-containing chemicals. After the 21.09.2015, there is no requirement for any downstream user in the supply chain to submit an own approval. The user only must check, if the material corresponds to the authorization.

Approval of authorization

The well-known authorities, that prepares the authorization, are the CTAC consortium, represented by law office Jones Day and the registered association VECCO represented by the consultants Eupoc GmbH.

The CTAC-consortium joined together the companies Atotech Deutschland GmbH, Aviall Services Inc., Bondex Trading Ltd., Cromital Spa, Elementis Chromium, Enthone GmbH und Lanxess Deutschland GmbH who have already submitted applications for authorization for the following materials:

No. of the Verw.	Description of the use	Duration
0032-01	Wording and Manufacturing of mixtures	≥12 years
0032-02	Functional chromium coating	12 years
0032-03	Functional chromium coating with decorative character	7 years
0032-04	Conversion layers for the use in aerospace, without relationship to the use of functional chromium coating and functional chromium coating with decorative character	12 years
0032-05	Conversion layers (without ETP) for the use in different industries, f.e. building sector, automotive, metal processing and mechanical engineering	7 years
0032-06	Passivation of galvanized steel - Electrolytic Tin Plate (ETP)	4 years

The process regarding the CTAC application, that started at the 12.08.2015 and will end at the 07.10.2015, is currently in the public consultation. Information is available under the above mentioned links:

- Details of the parts of the application published: <http://echa.europa.eu/de/addressing-chemicals-of-concern/authorisation/applications-for-authorisation>

- Guidance to the participation in the public consultation and application under: https://comments.echa.europa.eu/comments_cms/AfA_Comments.aspx

Regarding the surface pretreatment the application 0032-05 is relevant. The public parts are available under the following link. An authorization for an additional 7 years was submitted.

The association vecco (www.vecco.info) submitted the application, that is now not in the public consultation.

Analysis of the alternatives regarding Chrom-VI

Part of the approval 0032-05 is an analysis regarding the question, if alternatives regarding the use of Cr-VI-containing surface pretreatments exist.

The analysis is based on the report „chromefree surface pretreatment for Aluminium, documentation of the state of the arts“, that was published by the GSB in 2012 and the GSB quality regulations AL 631.

The multilevel approval systems of the GSB for alternative pretreatments is described as follows:

...As stated during the consultation phase, many customers are very demanding with regard to performance of chromate-free alternative products. Therefore, there is an increasing demand for approval and certification by the GSB (GSB International, 2012, 2013), whose testing and approval regime is even more stringent than those of Qualicoat....

This underlines that technology leadership of the GSB in the field of approval and testing of alternatives pretreatments. As long as 20 years ago, the GSB began the development of the technology standards and and the testing of alternative pretreatments.

Forecast

The question, if an authorization for the next 7 years for all parts of the approval 0032-05 applied is made, is difficult to access. A decision is not expected to be taken before the year 2016. The time frame for realisation of the change of the processes will be very tight.

A decision in favor of the further use of chrome-VI will not revoke the regulation and regularies that already prohibit the use of Cr-VI. F.e. the end-of-life vehicle directive that prohibited the use of chromates since 2007.

Furthermore Cr-VI-free pretreatments are increasingly required from the building sectors. Actual, there is no general regulation in Germany that prohibits the use. But the building certification systems regarding sustainable building (DGNB, BREEF, LEED, Green Building) award plus points regarding the use of Cr-VI-free pretreatments for Aluminium. This building certification with a high quality level is more and more required by investors and building companies.

Architects often post Cr-VI-free and Cr-free. Some district administrations and town require Cr-VI-free or Cr-free pretreatments for Aluminum (Berlin, München, Düsseldorf). Some syteme houses change their their specifications to alternatives pretreatments at the moment.

Closing remarks

If and when a company changes his pretreatment processes is an individual and managerial decision.

For the surface pretreatment of Aluminium are now available sufficient GSB approved, alternatives pretreatments that are testes over decades regarding their capabilities and competitiveness.

2 Declaration of Conformity (CE marking) in accordance with EN 1090 for

To begin, a few words on the EN 1090 standards. The standards consist of three parts:

- EN 1090 Execution of steel structures and aluminium structures
- Part 1: Requirements for conformity assessment of structural components
- Part 2: Technical requirements for steel structures
- Part 3: Technical requirements for aluminium structures

Since 1 July 2013, the new building product regulations have applied within the EU. Load-bearing structures are only allowed to be brought onto the market if the constructions are provided with a Declaration of Conformity and a CE marking in accordance with EN 1090. A transition period remains in effect for Germany until 1 July 2014. The Declaration of Conformity and CE marking require that the Factory Production Control (FPC) of the manufacturer of the load-bearing structure is certified. The certification is carried out by an institute accredited to do this.

The Declaration of Conformity and the CE marking contain all product characteristics, such as geometrical tolerances, suitability for welding, fracture toughness, fire behaviour, etc. The “Durability” section is of particular interest to coating companies. It contains information on corrosion protection, i.e. that the execution of the corrosion protection also has to be integrated into the FPC of the manufacturer of the load-bearing structures. If the manufacturer of the load-bearing structures carries out the coating work within his company, then this is easy.

In practice the coating work is carried out by hired coaters, which then have to be incorporated into the FPC of his customers. A distinction now has to be drawn between steel and aluminium.

- EN 1090-3 Aluminium

This standard contains all technical requirements for aluminium structures, e.g. installation, welding, tolerances.

Surface treatment is covered under point 10 and Annex F of this standard. It is noted in Annex F that the quality assurance and assessment can take place in conjunction with a recognised European quality seal. For the GSB coater this means that he can provide evidence for the FPC and the Declaration of Conformity of his customer by means of the Aluminium Quality Seal of GSB International in accordance with QR AL 631.

- EN 1090-2 Steel:

This standard contains all technical requirements for steel structures, e.g. installation, welding, tolerances.

The execution of the corrosion protection or the coating work is described under points 10, 12, 12.6 and Annex F of this standard. In comment 2 under point F1.1 in appendix F, reference is explicitly drawn to the two standards EN 13438 and EN 15773 for the powder coating of steel. In contrast to aluminium, this standard does not contain any explicit reference to a recognised European quality seal. However, in our view the Steel Quality Seal of GSB International is suitable in accordance with QR ST 663 as reference is explicitly drawn to the two cited standards in the quality regulations.

Please contact the GSB office for details: info@gsb-international.de.

3 “We support GSB”



The Board has developed this new logo and will make it available to our supporting members for use on websites, in brochures, e-mail signatures and on headed paper.

It expresses a clear commitment to high quality.

You can obtain master copies free of charge from the Düsseldorf office.

4 Banner advertising and reference project photos on the GSB website

The members have the possibility to advertise on the GSB website. The GSB only needs the logo of the member in a JPEG-file.

The costs are 150, 00 € / 3 months.

5 Training courses

- **Building projects: from enquiry to execution**

Location: Frankfurt am Main
Date: 29 October 2015
Number of participants: 12 per course date

- **Application of powder coatings**

Location: Magdeburg
Date: 7 and 8 October 2015
Number of participants: 24

- **Application of powder coatings**

Location: Magdeburg
Date: 19 and 20 January 2016
Number of participants: 24

6 GSB dates

2 September 2015

Board meeting in Düsseldorf

13 October 2015

Working Group-Testing in Krefeld

14 October 2015

Aluminium Quality Committee in Düsseldorf

7 Events

10 September 2015

GDA (German Aluminium Industry Association) seminar: Technology of Extruded Aluminium Profiles, in Düsseldorf

4 – 5 November 2015

GDA seminar: Surface Treatment of Aluminium, in Düsseldorf

5 – 6 November 2015

GDA Seminar: Aluminium and its alloys, in Clausthal-Zellerfeld

28 – 29 January 2016

Powder symposium, Dresden

5 – 6 April 2016

DFO (German Research Association for Surface Treatment) lightweight metal conference in Wiesbaden

8 List of experts

The Head Office has a list of professionals with all contact dates, which is available via: info@gsb-international.de.

9 Material and Member lists

The new Homepage of the GSB is online since June 2013. Please note that the previously added lists can be accessed from the GSB Homepage. If modifications exist the according list/s will be changed until the end of the month.

