Position Paper on Substances Generated in Surface Treatment and Coating Processes of Steel Articles

Scope

Surface treatment or coating processes of steel products can be part of their production process as article. In these processes, a coil, steel sheet or steel objects are submitted to the action of various substances or preparations. This may be the case in a variety of processes like, but not exclusively, metallic and organic coating, passivation, pickling. The registration duties and other provisions specified in REACH to ensure safe use of the substances involved in those processes are examined below.

Registration duties

The European producer of the resulting article is in a position of Downstream User with respect of the use of the substances he is introducing in the production equipment so as to perform the operations above. According to REACH article 5, he may also have to comply with his registrations duties should he himself act as an Importer or Manufacturer of these substances/preparations before using them in his surface treatment baths or coating processes, as for any Manufacturer/Importer of substances or preparations.

The generation of new substances may in some cases take place as part of the surface treatment or coating processes themselves. The objective of the present document is to provide some guidelines as of the possible registration duties associated to these substances.

We can distinguish:

- A. Substances that are included in the final article and are not intended to be released during the life-cycle of the article;
- B. Substances that are included in the final article and are intended to be released during the life-cycle of the article;
- C. Substances that are not included in the final article and are put on the market as such as substances on their own or in preparations;
- D. Substances that are not included in the final article and are considered as waste generated by the process;
- E. Substances that are appearing within the process and are further transforming into other substances in the same process.

In case A, REACH article 7(1) states that registration obligation for substances in articles is the consequence of two cumulative requirements:

- (a) The substance is present in those articles in quantities totalling over one tonne per producer or importer per year;
- (b) the substance is intended to be released under normal or reasonably foreseeable conditions of use.

The producer or importer of a steel article has to verify if both conditions are met. There is no intended release of the substances that are part of most coated or surface treated steel articles. For example, metallic coating of steel articles act, a.o., as corrosion protective layer and it is not an intended function of such article to release its coating. So no registration of these substances present in the coating or at the article surface is required.

However, the article producer or importer should be aware that the Agency may require a registration if it has grounds to suspect that the substance is released (intentionally or not) from the article and that the release of the substance may present a risk to human health or the environment (REACH article 7.5). If the producer or importer of a steel article believes that these conditions are met, he is advised to either proceed to a voluntarily registration or ensure that the substance has been registered for that use.

In case B: the producer or importer of a steel article has to register each released substance when its presence in the article exceeds 1 tons/y. He may check if some particular registration exemptions would apply.

In case C: the substance is resulting from a manufacturing process. If the process occurred in the European Economic Area, it has to be registered following the provisions of REACH Title II. If this substance is considered as a by-product and is not imported nor placed on the market (i.e. it is used by the same legal entity that produced it), it is exempted from registration (REACH Annex V, paragraph 5).

In case D: the substance is waste and, as such, is not submitted to registration obligations.

In case E: the substances that appeared during the process correspond in most cases to the definition of non-isolated intermediates; they are further transformed into new substances that are in their turn falling into one of the A—E cases. The manufacturer of a case E substance should verify that the intermediate is well corresponding to a non-isolated case; otherwise, he has to comply with the registration duties specified under REACH article 17 and 18.

Article producers and importers should first evaluate their registration obligations according to REACH Article 5 and 7 as expressed above.

Ensuring safe use of the substance throughout its complete life cycle

As expressed in case A, even when no intentional release is expected, the risks that may arise from the presence of the substance in the article have to be assessed. Without prejudice with respect to the registration duties, substances in articles need to be considered as part of the life-cycle of a substance, when incorporation into articles is one of its identified uses. Identified risks have to be communicated to the downstream supply chain to ensure safe use of the substance throughout the entire article life cycle, including its waste stage. This includes the waste disposal and the recycling/recovery stages of the substances contained.

Exposure estimates for these uses (REACH Annex 1 §0.3 and 5.2.2) and adequate communication on the safe use of the article containing the substance towards its downstream recipients have to be performed. The producer or importer of steel articles will refer to the Guidance on IR & CSA, chapters R13.2.5 and R18 for more information on these duties. The Guidance on Substances in Articles, chapter 8.8, also provides some help.

It is also emphasized that, irrespective of any registration duties, each article producer or importer must check whether there are no particular duties linked to the presence in the produced article of substances that fall under the restrictions or authorisation procedures of REACH. He will in particular ensure that he is complying with the notification and information duties laid down by REACH article 33.

Finally, the steel article producer or importer is advised to check whether the substance(s) included in the article have been registered for that use by any actor up the same or another supply chain. In many cases, information is passed through trade associations up the supply chain. In such case, an exemption from registration or notification duties applies.

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