



ECHA > Questions and Answers

Questions and Answers

REACH

REACH Registration

[804] Do chromic acids and their oligomers, generated in water from chromium trioxide, require their own registration under REACH?

REACH

REACH Registration Version: 1.0

Latest update: 04/06/2015

When brought in contact with water, chromium trioxide (EC number 215-607-8) forms two acids and several oligomers: Chromic acid (EC number 231-801-5), Dichromic acid (EC number 236-881-5), Oligomers of chromic acid and dichromic acid.

These chemical species are identified as substances of very high concern (SVHC) and included in the Candidate List1 as two separate entries.

Chromic acids and their oligomers generated in water from chromium trioxide are commonly referred to as an aqueous solution of chromium trioxide. With regard to the obligation to register, it may be justifiable in some specific situations described in the table below, to consider for practical reasons chromic acids and their oligomers as an aqueous solution of chromium trioxide. Hence, in these specific cases, chromic acids and their oligomers present in an aqueous solution of chromium trioxide can be covered by a registration dossier for chromium trioxide.

Important note: The presented approach is strictly limited to chromium trioxide and chromic acids and their oligomers generated from chromium trioxide in water. It derives from very specific aspects of the Chromium VI aqueous chemistry; the system in aqueous solution is a complex equilibrium between multiple chemical species which depends on several physico-chemical parameters and the different chemical species cannot be isolated from the aqueous solution. The approach can thus not be applied by analogy to any other substance.

Manufacturers and importers of chromium trioxide and chromic acids and their oligomers have to consider the following situations:

Actor / Scenario	Legal requirement	Explanation
Manufacturer or importer of chromium trioxide who generates chromic acids and their oligomers in water	One registration according to Article 10 for chromium trioxide	The generation of chromic acids and their oligomers by adding chromium trioxide to water and their further use have to be included in the registration dossier and have to be considered for the chemical safety assessment (CSA) and the chemical safety report (CSR). In case a downstream user (DU) generates chromic acids and their oligomers from chromium trioxide, this use has to be communicated up the supply chain and has to be included in the registration dossier.
Importer of both chromium trioxide and chromic acids and their oligomers generated in water from chromium trioxide	One registration according to Article 10 for chromium trioxide	The registrant has to register chromium trioxide and chromic acids and their oligomers in one dossier for chromium trioxide. It has to become clear from the registration dossier that chromic acids and their oligomers are also imported. Therefore, at least two compositions have to be provided in section 1.2 of the IUCLID dossier. The first composition refers to chromium trioxide; the second composition refers to the composition of chromic acids and their oligomers. A remark has to be entered to clarify the approach. The tonnage to be reported is the aggregated tonnage of both chromium trioxide and chromic acids and their oligomers. The tonnage has to be reported on the basis of equivalent chromium trioxide tonnage.
Importer of chromic acids and their oligomers generated in water from chromium trioxide	Registration according to Article 10 either for chromic acids and their oligomers generated from chromium trioxide or for chromium trioxide	In case the importer decides to register chromic acids and their oligomers in a dossier for chromium trioxide, it has to become clear from the registration dossier that what is actual imported are chromic acids and their oligomers. Therefore at least two compositions have to be provided in section 1.2 of the IUCLID dossier. The first composition refers to the generic substance "chromium trioxide"; its purity and composition should be indicated as 100 %. The second composition shall refer to the actual composition of chromic acids and their oligomers which are imported. A remark has to be entered to clarify the approach.
Manufacturer or importer of chromic acids and their oligomers generated by alternative methods other than from adding chromium trioxide to water or Importer who is unaware of the manufacturing methods of the chromic acids and their oligomers	Registration according to Article 10 for chromic acids and their oligomers	The approaches described above cannot be applied as the starting material for manufacturing chromic acids and their oligomers is not chromium trioxide or is not known.

Please, also see Q&A=805 (Can an application for authorisation for chromium trioxide cover the use of the chromic acids and their oligomers generated from adding chromium trioxide to water?)