



Minimum requirements for proper substance identification under REACH

This document aims at providing Members of the Precious Metals and Rhenium Consortium (PMC) a simple yet harmonised recommendation on minimum requirements for proper substance identification under REACH. This document may be regarded as an extension of the Eurométaux guidance, in order to address items that are particular to precious metals and rhenium substances and intermediates.

The purpose of a proper identification is to gather sufficient information on the identity, composition and characteristics of a substance or intermediate to allow Competent Authorities, if necessary, to assess and corroborate the sameness of the material registered by a given Lead Registrant and the material co-registered by other manufacturers and importers.

In line with the REACH Regulation and associated Guidance documents, as well as with Eurométaux's recommendation, the PMC hereby invites Members to perform the following analysis as applicable to each type of precious metal (PM) or rhenium substance and intermediate, as it is placed on the EEA market:

- **PM or Re in metallic form:**
 1. Elemental analysis (by techniques including ICP-MS, ICP-OES, XRF etc. as relevant)
 2. XRD
 3. Particle size by laser diffraction and surface area by N-BET (to provide evidence on the inhalation risk or absence of inhalation risk)
- **Solid PM compounds:**
 1. Elemental analysis (including any other elements the substance may contain, such as H, N, Cl, P, O etc., by techniques including ICP-MS, ICP-OES, XRF etc. as relevant)
 2. XRD
 3. IR spectroscopy
 4. Particle size by laser diffraction and surface area by N-BET (to provide evidence on the inhalation risk or absence of inhalation risk)
- **Solution/liquid PM compounds:**
 1. Elemental analysis (by techniques including ICP-MS, ICP-OES, XRF etc. as relevant)
 2. Raman spectroscopy
- **UVCB Complex PM Refinables:**
 1. Elemental analysis (by techniques including ICP-MS, ICP-OES, XRF etc. as relevant; for solids additionally any other elements should be determined that the substance may contain, such as H, N, Cl, P, O etc.)
 2. Particle size by laser diffraction and surface area by N-BET (to provide evidence on the inhalation risk or absence of inhalation risk)
- **Other structural information required**
 1. In addition to the above mentioned analyses, ECHA requests also requests ultra-violet (UV) and nuclear magnetic resonance (NMR) spectra
 2. For the above mentioned substances, UV and NMR spectra are not normally necessary. We will need to add an explanation in the dossier why these analyses are not appropriate and do not provide additional relevant information
 3. In some specific cases, UV and NMR may be useful. This will have to be decided on a case-by-case basis

Although part of the information generated as per the recommendations above is required in the Registration Dossier itself, part of it shall be retained and archived by each legal entity and be available upon request by REACH authorities.

The proper identification and characterisation of a substance or intermediate is the responsibility of each registering legal entity.



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