



PROPOSAL FOR IMPURE PRECIOUS METAL CONTAINING-INTERMEDIATES

I. Background

- The Members of the PM & Re Consortium were invited to declare to the Consortium the precious metal bearing materials that required registration under REACH.
- Materials were originally divided across two lists, one for simple materials (“pure” mono-constituent with known and stable compositions) and a second for complex ones (UVCB with known but varying composition).
- Simple precious metal substances and intermediates were listed on indicative lists, allowing for a certain level of adjustment based on technical assessment (Appendix 4 of the Consortium Agreement).
- Complex materials, generally considered as UVCB transported isolated intermediates (TII), were listed in a non-waste complex refinables inventory.
- Following a preliminary composition assessment, some of the above UVCB TII were shown to contain more than 80% of a same precious metal, therefore fitting the definition of mono-constituent substance (e.g.: “impure” silver, “impure” gold, platinum “concentrate”, palladium “concentrate”, silver chloride from slags, silver nitrate from silver electrolysis, etc.).
- The remaining 20% of their composition can include a variety of impurities. We therefore propose to call these substances “impure”.
- These “impure” mono-constituent precious metal bearing materials were then moved to the simple materials indicative lists, together with the pure ones.
- For substance sameness and classification needs, and subsequent handling and manipulation measures and commercial practice, several Members have suggested to clearly differentiating the pure simple materials from the impure ones.
- There is a need to translate this suggestion into a clear REACH registration path.

II. Commercial practice

- The London Bullion Market Association (LBMA) and the London Platinum and Palladium Market (LPPM) are London-based but worldwide recognised trade associations that represent the wholesale silver, gold, platinum and palladium bullion markets in London.
- The LBMA and LPPM Good Delivery Lists are widely recognised as representing the *de facto* standard for the quality of silver, gold, and platinum and palladium bullion, which are based on stringent criteria for assaying standards and quality. The minimum fineness of silver,



gold, platinum and palladium as laid down in the Good Delivery specifications are 99,90 %; 99,50 %, 99,95 % and 99,95 %, respectively. These rules are described and available in: http://www.lbma.org.uk/docs/gdlvarious/GD_Rules_Current.pdf and <http://www.lppm.org.uk/contentitem.aspx?cid=366>.

III. REACH rules

- The 80% rule is applied to differentiating mono- from multi-constituent substances. For some sectors, this rule establishes a reasonable threshold for substance sameness considerations.
- For others, this is not the case. For instance, the Cu Consortium separates > 99,90 % “pure” Cu metal from 80 % – 99,90 % “impure” Cu anode. N.B.: An EC number already exists for Cu anode, which has been pre-registered separately. This is not the case for “impure” precious metals.
- One registration dossier is to be submitted for a material, whether it is manufactured and/or imported as a substance and/or as an intermediate – it is still the same substance.
- According to REACH guidance, two or more substances can be considered to be same if they can both or all be described and registered under REACH using a common set of data on physicochemical, toxicological and eco-toxicological properties.
- According to REACH, the potential registrants on a “same” substance can agree to disagree on the classification of their materials. A material can hence have different classifications and still be registered in one single dossier.
- REACH is Law and hence, overwrites any existing “commercial practice” unless the reasons for keeping the commercial practice can be documented by applying REACH rules.

IV. Proposal

In order to distinguish pure from impure precious metals in their metallic form, the following is proposed (cf. Tables 1 and 2):

Table 1. Proposed purity thresholds for precious metals in their metallic form.

Precious Metal	Silver	Gold	PGM
Pure	> 99,90 %	> 99,50 %	> 99,95 %
Impure	80 – 99,89 %	80 – 99,49 %	80 – 99,94 %



Table 2. Options for REACH registration – to be explored and discussed by PMC Members.

Proposal	1	2
Registrations	One dossier: covering both the impure and the pure material	Two separate dossiers: one for the impure material and one for the pure material
Generic description of the registration strategy	The impure material will be registered: • as an intermediate • with a specific impurity profile • described with the dataset existing / developed for the pure substance • within the pure substance dossier • with the same registration number as for the pure substance dossier	The impure material will be registered: • as an intermediate • with a specific impurity profile • described with a different data set (but in theory a copy-paste of the relevant parts of the pure substance dossier + information on the most significant impurities) • in a separate dossier, for the impure intermediate only • with its own registration dossier
At SIEF level, it involves:	Proving and documenting sameness: easy	Proving and documenting non-sameness: difficult
At ECHA level, it involves:	- Confirm SIEF formation after sameness has been agreed - Two or more classifications for each substance	- Request and justify split of pre-SIEF of each “pure substance” in two, in order to have one pre-SIEF for the pure substance and one pre-SIEF for the “impure intermediate” - Request and justify specific ID number for “impure intermediate” - One classification for pure substance and one or more for impure intermediate → different risk management measures



At Consortium level, it involves:	Workload: one Dossier is created, covered by consultants' time Cost for Consortium: one Dossier is created, covered by consultants' fees Costs for Members: Companies having to register: a) The pure substance only: pay according to the cost-sharing formula (no extra cost). b) The impure intermediate < 1000 t/a only: pay a nominal fee at the end of the process (cost to be proposed by CWG and approved by Members of the Consortium). c) The impure intermediate > 1000 t/a only: pay according to the cost-sharing formula (proposed: same weight as substance in lowest tonnage band). d) Both the pure substance and the impure intermediate: pay for the pure substance only, as in a) above.	Workload: two Dossiers are created → need to prepare it internally (PMC staff) or increase consultants' time Cost for Consortium: two Dossiers are created → if prepared internally, no difference. If prepared by projects' consultants, need to increase consultants' fees Costs for Members: Companies having to register: a) The pure substance only: pay according to the cost-sharing formula (no extra cost). b) The impure intermediate < 1000 t/a only: pay a nominal fee at the end of the process (cost to be proposed by CWG and approved by Members of the Consortium). Cost will include project consultant's extra time and fees – cost will ultimately be a bit higher than in proposal 1. c) The impure intermediate > 1000 t/a only: pay according to the cost-sharing formula (proposed: same weight as substance in lowest tonnage band). Cost will include project consultant's extra time and fees – cost will ultimately be a bit higher than in proposal 1. d) Both the pure substance and the impure intermediate: pay twice: once as per a) and once as per b) or c) depending on their specific tonnage situation.
---	---	--