



ID Card

Electrolyte from gold electrolysis

Version 4 July 2023

Please note that discussions on the ID Cards are currently ongoing.
Should you need further information / detail, please contact info@epmf.be
The content of this ID Card may be adjusted as the Refinables Project develops.

Notes:

- This ID card is used to support the substance sameness discussions in SIEFs and to describe the substance/group to the best of the SIEF members' knowledge.
- It also aims at grouping communications relevant to the request of available data or information, the approval of the proposed Lead Registrant and the registration strategy with the SIEF.
- It is the responsibility of each individual registrant to identify their substance and to report company-specific identity in their Registration Dossier (section 1 of IUCLID).

DISCLAIMER

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

All data and information contained in this document shall be treated by the receiving party (i) in full confidence with the adequate respect of any confidential and/or proprietary nature of such information and (ii) only in the framework of the purpose of agreeing on substance sameness, Lead Registrant and overall REACH Strategy for the concerned Substance under REACH (the 'Purpose').

The receiving party (and any representative) shall not be allowed to use or circulate any or all parts of this document for any other purpose than the Purpose, without the prior written consent of the European Precious Metals Federation (EPMF).

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1. Identification of the group

Table 1. Identification of the group

	Proposed by EPMF Refiners Work Group	Pre-registered as
Name	Electrolyte, gold electrolysis	Slimes and Sludges, precious metal refining
EC number	EC 933-944-5	308-516-0
CAS number		98072-61-8
Description	Fresh or spent aqueous gold trichloride solution used in and resulting from the electrolytic refining of gold. This electrolyte is constituted of gold trichloride, chlorhydric acid, and it may contain some other metallic and non-metallic ions in varying concentrations, which will vary depending on the nature and composition of the primary or secondary raw material from which gold is recovered.	None

N.B.: The description proposed above will be further detailed by EPMF for Registration purposes.



2. Synonyms (and/or commercial names)

- Reaction mass of gold trichloride/tetrachlorauric acid, platinum tetrachloride and chlorhidric acid (multiconstituent substance, gold electrolyte)
- Impure gold trichloride

3. Substances that are similar or can be considered as the same

None

4. Typical composition

Table 2. Typical composition

Type	Name of the element	Symbol	Species present (<i>one line per species</i>)	Typical concentration range
Precious metals	Gold	Au	AuCl ₄	0-33
	Iridium	Ir		0-2,5
	Palladium	Pd		0-2,5
	Platinum	Pt		1-29
	Rhodium	Rh		0-2,5
	Ruthenium	Ru		0-2,5
Other Metals	Copper	Cu		0-2
Other constituents	Chlorine	Cl	HCl	0-17,5
	Water	H ₂ O	Water	0-43

N.B.: Classification drivers are indicated in red (see also Table 4).

The composition given above represents the typical compound content available to the Members of the EPMF by 9 February 2012. This typical content represents the majority of the Gold Electrolyte that is manufactured and/or imported on the EEA market.

In a UVCB substance, the number of constituents is relatively large and/or; the composition is, to a significant part, unknown and/or; the variability of composition is relatively large or poorly predictable. Hence, concentration ranges outside the ones given above do not exclude sameness and are usually referred to as atypical or exceptional situations. Each potential registrant is responsible for performing its own elemental analysis (EPMF will specify preferred method in due course).

5. Lead Registrant

Aurubis AG (Germany) volunteers to be the Lead Registrant for this intermediate. The European Precious Metals Federation (EPMF) will provide support to the Lead Registrant as laid down in the EPMF Agreement.