Pdパウダー

Report on recycled content (Type II environmental labelling)

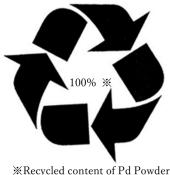
This report is on the recycled content of Pd Powder produced at Materials Eco-Refining Co., Ltd. in FY2023. The environmental claim in this report corresponds to the self-declared environmental claims (Type II environmental labelling) defined in ISO 14021.

I. Environmental claims

Claimed Product: Pd Powder

Environmental claim: Recycled content of Pd Powder 100%

(Product Photo) Symbol:



II. Claimant, Product Manufacturer

Claimant: MITSUBISHI MATERIALS CORPORATION

Department in charge: METALS COMPANY, Resource circulation Div. Business development Dept.

Product Manufacturer: Materials Eco-Refining Co., Ltd.

III. Explanatory statements

The recycled content of each powder cannot be calculated because raw materials for Pd are 1. blended after being fed into the manufacturing process and are temporarily stored or retained during the subsequent process. Therefore, this claim is for 1,827.66 kg of Pd Powder produced in one year from April 1, 2023, to March 31, 2024, at Materials Eco-Refining Co., Ltd.

**Reference on Smelting, Refining, and Recycling of Precious Metals: https://www.jim.or.jp/journal/m/pdf3/58/10/557.pdf

- 2. The use of recycled materials in the production of Pd Powder reduces the following environmental impacts.
 - Greenhouse gas emissions: Reduced energy consumption on stages of raw material acquisition (ore mining, beneficiation (e.g., crushing and flotation beneficiation), and transportation) reduces greenhouse gas emissions.
 - Mineral Resource Mining: Reducing the mining of natural resources through recycling reduces

- the amount of mine waste and eliminates loss of biodiversity by land use changes.
- Water consumption: The flotation process to concentrate Pd in ore uses a large amount of water. The use of recycled materials eliminates this process and reduces water consumption.
- Waste volume: Recycling reduces the amount of waste and environmental impacts associated with waste disposal and contributes to extending the life of the final disposal site.
- 3. Recycled content of Pd Powder was calculated as shown below.

$$X (\%) = A/P \times 100$$

X is the recycled content, expressed as a percentage;

A is the mass of recycled material;

P is the mass of product.

- 4. Copper concentrates used as raw materials for copper smelting and refining may contain trace amounts of Pd, however, the content is below the detection limit of chemical analysis and cannot be quantified. In addition, materials containing Pd that originate from other smelters or metal refining processes are considered post-consumer materials as defined in ISO14021, and are therefore recycled materials.
- 5. Verification by SGS Japan Inc. dated November 30, 2024, confirmed that this environmental claim meets the requirements specified in ISO 14021.