

Report on recycled content
(Type II environmental labelling)

This report is on the recycled content of Refined Bismuth (Ingot) produced at Hosokura Metal Mining 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 : Refined Bismuth (Ingot)

Environmental claim : Recycled content of Refined Bismuth (Ingot) Greater than 92.2%

Symbol :

(Product Photo)



※Recycled content of Refined Bismuth (Ingot)

II. Claimant, Product Manufacturer

Claimant : MITSUBISHI MATERIALS CORPORATION

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

Product Manufacturer : Hosokura Metal Mining Co., Ltd.

III. Explanatory statements

1. The recycled content of each ingot cannot be calculated because raw materials for bismuth are blended after being fed into the manufacturing process and are temporarily stored or retained during the subsequent process. Therefore, this claim is for 36,166 kg of Refined Bismuth (Ingot), produced in one year from April 1, 2023, to March 31, 2024, at Hosokura Metal Mining Co., Ltd.

※Reference on bismuth smelting :

https://www.jstage.jst.go.jp/article/journalofmmij/123/12/123_12_719/_pdf

2. The use of recycled materials in the production of Refined Bismuth (Ingot) 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 bismuth 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 Refined Bismuth (Ingot) 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. Refined Bismuth (Ingot) contains 7.8% bismuth (NOT recycled materials) from essential reagents in electrolytic process. In other words, all raw materials except the reagent are recycled materials.
5. Bismuth-containing raw materials generated in other smelters are defined as recycled materials because they are categorized as post-consumer materials in ISO 14021.
6. Verification by SGS Japan Inc. dated November 30, 2024, confirmed that this environmental claim meets the requirements specified in ISO 14021.