

Antimony trioxide for solar glass





Overview

Does solar glass contain antimony?

However, the composition of solar glass varies, especially concerning antimony (Sb) content, depending on the production method. Antimony is used to enhance the performance of patterned solar glass but introduces environmental and health concerns, complicating recycling efforts.

Is antimony used in Photovoltaic Glass?

The flame-retardant sector currently accounts for around half of end use of antimony. "The use of antimony trioxide as a clarifying agent in photovoltaic glass is a developing trend, and it is expected to maintain rapid growth in the coming years," Kang said.

What is antimony trioxide?

Antimony trioxide, with the chemical formula Sb_2O_3 , is a white, crystalline powder derived from the oxidation of antimony metal. It is highly valued for its ability to enhance fire resistance in materials and catalyze chemical reactions.

Should PV module manufacturers be required to disclose antimony compounds?

To address these challenges, the ESIA Recommendation paper suggests that the European Union should consider mandating PV module manufacturers under the upcoming Ecodesign regulations to disclose the composition and manufacturing process of solar glass, including additives like antimony compounds.



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Release: ESIA Recommendation Paper ...

Oct 6, 2023 · However, the composition of solar glass varies, especially concerning antimony (Sb) content, depending on the production method. ...

Necessity for recycling photovoltaic glass: Managing ...

The same study also reported that antimony trioxide leaches from solar glass after prolonged contact with water and subsequently undergoes hydrolysis, forming the antimony oxo anion ...

ANTIMONY TRIOXIDE

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Concept Note/ Blue Print on Management of Antimony ...

Jul 11, 2022 · The textured solar glasses used in solar PV modules contain Antimony in the form of Antimony trioxide (ATO). ATO is considered by World Health Organization [WHO 2003] to ...

Glass / ceramic

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product of antimony -- as a refining agent. Antimony demand from the photovoltaic industry ...

Addressing uncertain antimony content in solar glass for ...

Nov 7, 2023 · Addressing uncertain antimony content in solar glass for recycling
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Note Print on Management of Antimony Containing Glass from End-of-Life of the Solar PV Panels1.
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