

## Features

- Established a technology of producing foam glass from waste glass with the elution of heavy metals suppressed.
- Applicable as a recycling technology for waste glass that contains heavy metals, e.g., fixed partial denture (FPD) glass and car glass.
- Foam glass is lightweight and porous, and ideal for a variety of practical applications, such as water purification materials and building materials (including thermal insulation materials and roadbed materials).

## Overview

(Technical principles, actions, etc.)

A conventional technique to produce foam glass from waste glass was already put to practical use, but the elution of the heavy metals in the foam glass has not been taken into consideration.

This technology manufactures foam glass from waste glass added with an agent (e.g., calcium hydroxide) under certain conditions to suppress the elution of the heavy metals.

That is, this technology makes it possible to produce foam glass that will not allow the heavy metals to leach in the environment. Foam glass is lightweight and porous, and ideal for a variety of practical applications.

The technology provides an environment-friendly recycling technology for foam glass used for a variety of practical applications.



Roadbed materials such as pavement materials for sidewalks



Security gravels, gardening materials, and water purification materials

## Introductory Track Record

- Japan: Licensing agreements with two foam glass manufacturers.

## Effects

- Makes it possible to apply the technology to waste glass materials that include heavy metals, the recycling of which was difficult in the past.
- Allows the practical use of lightweight and porous foam glass for a variety of applications.
- Contributes to improvement in the recycling rate of waste glass.

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