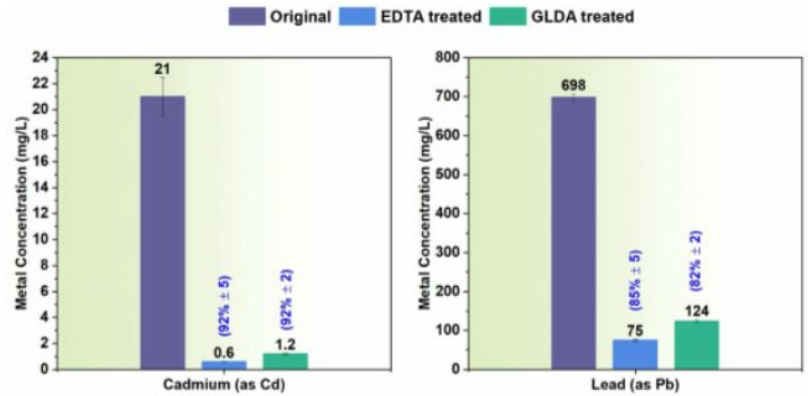




PENDING

(IN202411039142)

## A process for heavy metal remediation in municipal solid waste compost



## NEED

Municipal solid waste compost (MSWC) often contains toxic heavy metals like lead, cadmium, and zinc, which leach into soil and crops, causing long-term health risks and reduced agricultural productivity.

## MARKET ANALYSIS

The global waste management market is projected to grow at a CAGR of 5.3%, reaching \$2.5 trillion by 2033. Drivers include stricter regulations, rising urbanization, and demand for eco-safe composting. [Source: Precedence Research, 2023]

## TECHNOLOGY OVERVIEW

The technology offers a leaching method using GLDA—a biodegradable chelating agent—under controlled pH, contact time, and agitation to remove up to 95% of heavy metals from MSWC without high energy inputs or toxic solvents.

## Target Industries

Waste Management, Urban Agriculture, Environmental Services, Compost treatment platforms, sustainability solution providers, municipal waste contractors, eco-innovation research firms in remediation and recycling sectors.

## TECHNOLOGY KEY FEATURES

95% cadmium, 85% lead, and 80% zinc removal; GLDA-based eco-friendly process; works at ambient temperature; no hazardous chemicals; pH, agitation, and contact time optimized for best results.

## AT A GLANCE

- SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), SDG 15 (Life on Land)

[Read more here](#)

Technology is available for licensing/ co-development.

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