FAQ

What is Dolocrete®?

Dolocrete® is the name given to the innovative waste treatment technology widely accepted because of its ability to encapsulate a wide range of toxic waste. Dolocrete® is an environmentally safe inorganic geo-polymer binder system that micro-encapsulates wastes.

How is Dolocrete® used to treat hazardous waste?

The Dolocrete® product consists of a specially calcined dolomitic binder and proprietary additives. When mixed with liquid and fillers, the finished product sets hard. The treated hazardous waste undergoes a unique micro-encapsulation process that chemically traps both inorganic and organic substances.

How does Dolocrete® differ from alternative technologies?

Unlike other technologies that rely only on chemical reaction or only on physical containment of the waste, Dolocrete® actually micro-encapsulates the waste - trapping it both chemically and physically. Although there are other treatments available for specific wastes, Dolocrete® has the ability to treat mixed wastes including those that incorporate both organic and inorganic species.

What is the volume of waste after treatment with Dolocrete®?

The waste to Dolocrete® ratio varies according to the waste being treated. Low level wastes can be treated with as little as 10% increase in volume. Typically a mix ratio of 4:1 waste to Dolocrete® is used. The end result is a substantially lower volume and weight increase of the Dolocrete® treated waste. This provides considerable flow on benefits such as lower disposal, handling and transport costs.

What kind of waste can be treated?

Dolocrete® technology has successfully encapsulated both inorganic and organic sludges and solids. These include waste products from metal and chemical manufacturing, mining processes, agricultural pesticides, petroleum sludge, waste tannery sludge, and contaminated soils.

Does it conform to international standards?

Dolocrete® treated waste readily passes the Toxic Characteristic Leaching Procedure (TCLP) test based on USEPA Method 1311, Multiple Extraction Procedure (MEP) USEPA Method 1310A and Unconfined Comprehensive Strength (UCS) USEPA Method 1320.

Is it safe for the environment?

Dolocrete® has many environmental benefits. Dolocrete® exhibits odour absorbing properties, and does not generate process emissions. Raw materials can be brought on site allowing for in-situ treatment of waste and enabling safe transport of the treatment material. The low treatment and bulk out ratios can prolong the life of landfill sites. Furthermore, low TCLP results achieved with Dolocrete® treated waste allow disposal at lower classification waste sites.

What does it cost?

The cost of treatment is dependent upon the nature of the waste, the mix ratio required, site conditions, and transport costs. Quotes on specific waste can be obtained by contacting the DoloMatrix team.

What are the cost benefits of Dolocrete®?

- A low ratio of Waste to Dolocrete® can be used in treatment

- Low quality water, even industrial brine can be used in mixing Dolocrete®
- A wide range of toxic waste can incorporated into a batch
- Dolocrete® can encapsulate clay soils and high organic content soils
- Mixing of waste can be carried out on-site
- Conventional solid and slurry mixing equipment such as concrete mixers, pug mills and screw augers will effectively mix commercial quantities of Dolocrete®