

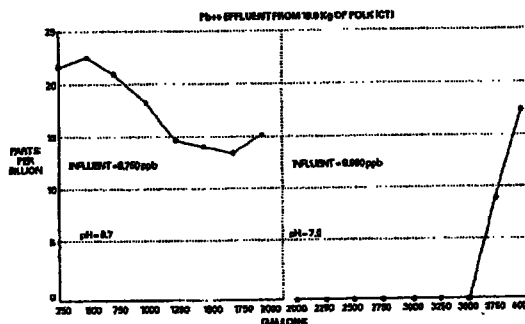
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(54) Title: ACID CONTACTED ENHANCED ADSORBENT AND/OR CATALYST AND BINDER SYSTEM



(57) Abstract

This invention relates to a process for producing an enhanced adsorbent particle comprising contacting a non-amorphous, non-ceramic, crystalline, porous, calcined, aluminum oxide particle that was produced by calcining at a particle temperature of from 300 °C to 700 °C, with an acid for a sufficient time to increase the adsorbent properties of the particle. A process for producing an enhanced adsorbent particle comprising contacting a non-ceramic, porous, oxide adsorbent particle with an acid for a sufficient time to increase the adsorbent properties of the particle is also disclosed. Particles made by the process of the instant invention and particle uses, such as remediation of waste streams, are also provided. The invention also relates to a method for producing an adsorbent and/or catalyst and binder system. The invention also relates to particles made by the process, binders, and methods for remediating contaminants in a stream. The invention also relates to an anchored adsorbent and/or catalyst and binder system.