

Testing Of Perlite & Diatomaceous Earth (DE) Filter Aids

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Abstract

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The use of diatomaceous earth (DE) and perlite filter aids is ubiquitous in a wide range of industries, including beverage, chemicals, food processing, pharmaceutical, mining, water treatment, and waste treatment.

Factors which ultimately govern the performance characteristics of filter aids are associated with the raw materials (crude ore) used, as well as the processing and handling procedures (beneficiation) employed.

An efficient, economical filter aid must: a) have rigid, intricately shaped, porous individual particles; b) form a highly permeable, stable, incompressible filter cake; c) remove fine solids at high rates of flow; and d) be chemically inert and essentially insoluble in the liquid being filtered.

In this presentation, the author discusses standard physical and chemical test methods, and how these methods relate to finished-product consistency and commercial acceptability.