



High-performance filtration material with a microporous silica structure

Diatomaceous earth (D.E.) used for filtration is a natural filter material composed of fine, porous particles derived from fossilized diatom shells. It is widely used in pre-coat and body feed filtration processes as a filtering aid when solid particles in the suspension are extremely fine and easily permeable. Diatomaceous earth helps retain fine solid particles that might otherwise pass through the filter media. Its use improves filtrate clarity, provides higher flow rates, more uniform filtration processes, shorter cycle times, drier filter cakes, and helps protect and extend the life of the filter media. Diatomaceous earth is applied before pumping the slurry into the filter press.

Technical data

Material:

- Standard Diatomaceous Earth
- Celpure Diatomaceous Earth – ultra-pure, acid-washed

Operating parameters

Precoat - preliminary layer

Dosage: 48,5g/ 0,093m²
Filter area: 521g/m²
Flow rate: 10-20l/min/m²

Body feed - dosage during filtration process

Dosage : 454-1360g diatomaceous earth per 454g contaminant

FEATURES

- Efficiency in retaining microscale contaminants.
- High throughput while maintaining filtration effectiveness.
- An eco-friendly and natural alternative compared to synthetic filter materials.
- Ease of regeneration and reuse in some applications.

USAGE STAGES

Preliminary layer - precoat	Auxiliary dosing - body feed	Proper filtration	End of process and celaning
Applying a thin layer of diatomaceous earth onto the filtration surface	Prevents filter clogging and maintains consistent filtration capacity.	Solid particles are retained in the porous structure.	Removal of spent diatomaceous earth (usually as sludge).

APPLICATION

- beer, juices, syrups, olive oils and other liquids
- chemicals in the manufacturing process
- pharmaceutical liquids
- emulsions and creams
- drinking water treatment