

Effects of Processing Conditions on the Properties of Porous Diatomite Granules Prepared by Sodium Alginate Gelation

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Supplementary Materials

A detailed summary of the processing conditions and composition of diatomite slurry batches is depicted in Figure S1.



Figure S1. Scheme illustrating the ball-milling conditions and the processed diatomite slurries used to prepare the diatomite/sodium alginate dispersions and, subsequently, the porous diatomite granules.

Additional diatomite-sodium alginate granules obtained at each step of the processing route, including aging in a 10 wt.% CaCl₂ bath followed by cleaning with DI water (a), drying overnight at 80 °C (b), and heat treatment at 1200 °C for 1 h in air (c) are presented in Figure S2 and Figure S3

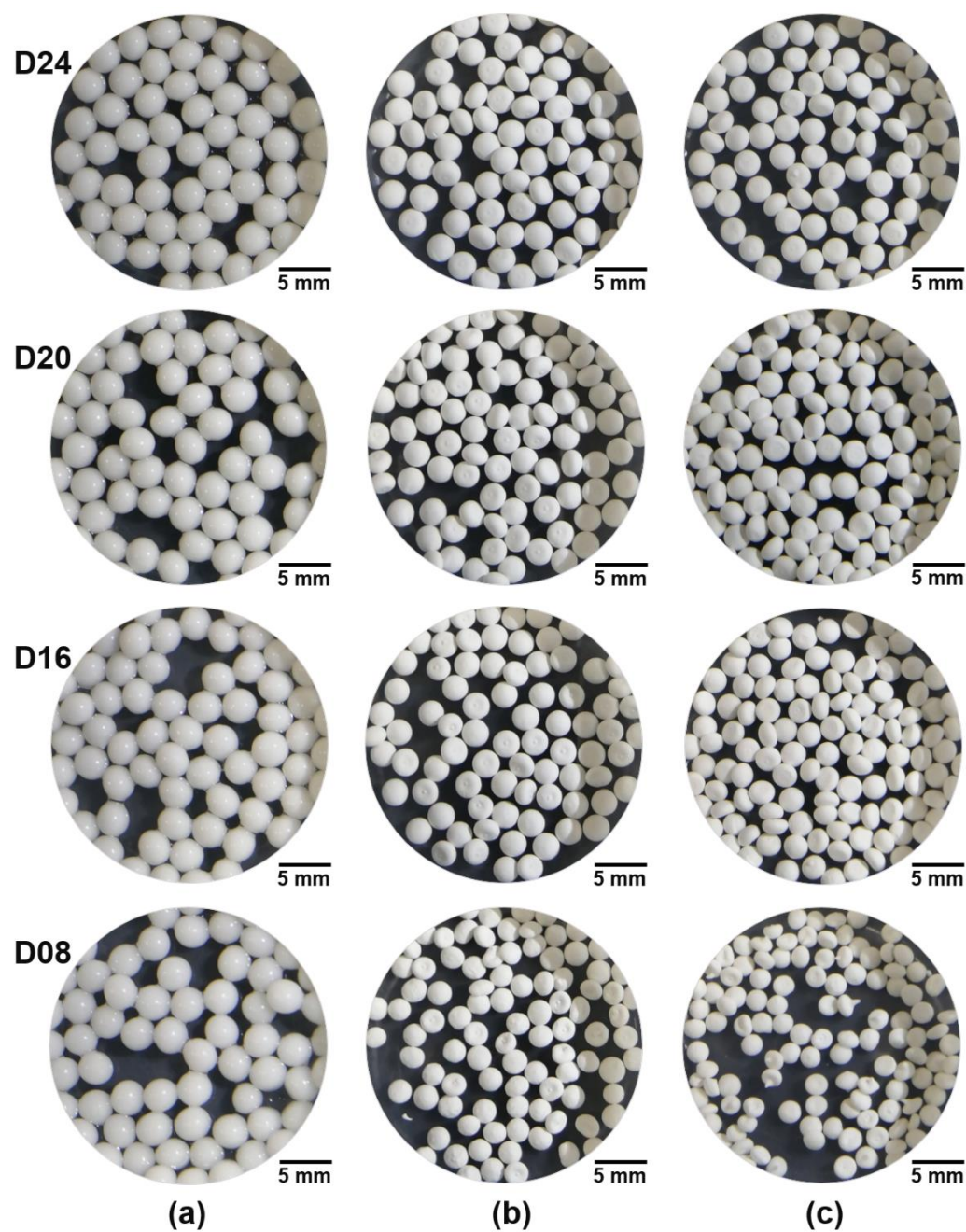


Figure S2. Representative porous diatomite granules (D08-D24) obtained after each step in the processing route: (a) aging (CaCl_2 bath) and cleaning (DI water), (b) drying (80°C , overnight), and (c) a heat treatment at 1200°C for 1 h in air.

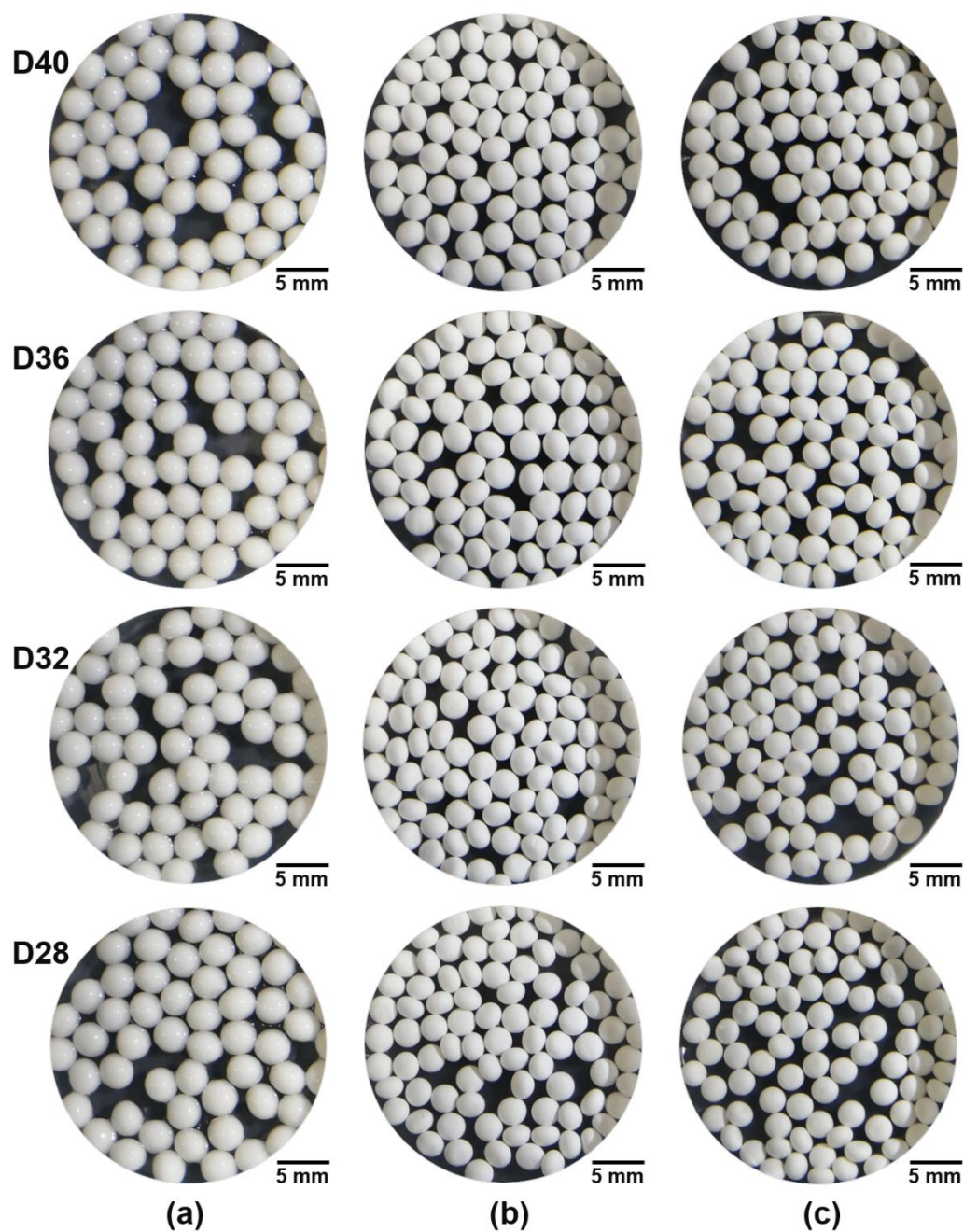


Figure S3. Representative porous diatomite granules (D28-D40) obtained after each step in the processing route: (a) aging (CaCl_2 bath) and cleaning (DI water), (b) drying (80°C , overnight), and (c) a heat treatment at 1200°C for 1 h in air.