

Abstract Submitted
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Packing fraction of continuous distributions JOS BROUWERS, TU Eindhoven — This study addresses the packing and void fraction of polydisperse particles with geometric and lognormal size distribution. It is demonstrated that a bimodal discrete particle distribution can be transformed into said continuous particle-size distributions. Furthermore, original and exact expressions are presented that predict the packing fraction of these particle assemblies. For a number of particle shapes and their packing modes (close, loose) the applicable parameters are given. The closed-form analytical expression governing the packing fractions are thoroughly compared with empirical and computational data reported in the literature, and good agreement is found.

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