

**Goos, Peter; Donev, Alexander N.**

***D*-optimal minimum support mixture designs in blocks.** (English) Zbl 1105.62076  
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Summary: An easy method to construct efficient blocked mixture experiments in the presence of fixed and/or random blocks is presented. The method can be used when qualitative variables are involved in a mixture experiment as well. The resulting designs are *D*-optimal in the class of minimum support designs. It is illustrated that the minimum support designs are more efficient than orthogonally blocked mixture experiments presented in the literature and only slightly less efficient than *D*-optimal designs.

**MSC:**

[62K05](#) Optimal statistical designs

[62K10](#) Statistical block designs

Cited in 2 Documents

**Keywords:**

Fixed and random blocks; Minimum support design; Mixture experiment; Orthogonal blocking; Qualitative variables

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