

Properties and stability of furazan-1,2,3,4-tetrazin-1,3-dioxide and co-crystals on its basis

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Abstract

In the work, thermal decomposition, sensitivity parameters to mechanical influences, characteristics of thermal explosion and burning of furazan-1,2,3,4-tetrazin-1,3-dioxide and two co-crystals on its basis is considered. The first (known) co-crystal consists of furazan-1,2,3,4-tetrazin-1,3-dioxide and a dinitrazapentan with equimolar ratio of components, the second (new) co-crystal includes furazan-1,2,3,4-tetrazin-1,3-dioxide and benzotrifurocsan with the ratio of components 2/1 in moles. Possibilities for regulating the complex of characteristics of furazan-1,2,3,4-tetrazin-1,3-dioxide are shown at co-crystallization with the specified substances.