Title (en)

PROCESS FOR THE SOLVENTLESS PRODUCTION OF PYROTECHNICAL PRODUCTS HAVING A THERMOSETTING BINDER

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Application

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Priority

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Abstract (en)

[origin: US4657607A] The present invention relates to the field of compound pyrotechnic products. The invention relates to a three-step, solvent-free process for the manufacture of compound pyrotechnic products containing a thermosetting binder obtained by reaction of a polyhydroxylated prepolymer with a diisocyanate, which process is characterized in that: in a first step the said prepolymer is mixed with an energetic charge and with a quantity of diisocyanate representing 50 to 90% of the required stoichiometric quantity, in a second step the remainder required to attain the said stoichiometric quantity is added and, after mixing, the pasty mixture thus obtained is extruded, in a third step the crosslinking of the thermosetting binder is completed hot. The invention makes it possible to obtain industrially, by extrusion, small-diameter pyrotechnic products containing a thermosetting binder without restriction on the "pot life" period. The invention is particularly suitable for the production of compound propellent powders for arms.

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