

Energetic Plasticizers for Gun & Rocket Propellants¹

D. Kumari, R. Balakshe, S. Banerjee, and H. Singh

*Department of Applied Chemistry, Defence Institute of Advanced Technology (Deemed University),
Girinagar, Pune-411025, India*

e-mail: sharidwar@gmail.com, banerjeess@diat.ac.in

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Abstract—Energetic plasticizers have been used in the propellant industry for improving mechanical properties of propellant formulations and to boost energy. In modern energetic propellant composition, conventional plasticizers are being gradually replaced by energetic plasticizers having nitro, nitroamino, azido and other energetic groups or combination of energetic groups in the same molecule. The present article covers the recent advances in the field of energetic plasticizers with special reference to their applications in gun and rocket propellants. The paper also covers future scope for R&D work in this area.

Keywords: energetic plasticizers, gun propellants, rocket propellants, nitramine.

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