

Article

n-Butyl Cyanoacrylate Synthesis. A New Quality Step Using Microwaves

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Abstract: Alkyl cyanoacrylates are interesting products for use in industry because of their properties enabling them to stick together a wide range of substrates. *n*-Butyl cyanoacrylate is one of the most successfully used tissue adhesives in the field of medicine because it exhibits bacteriostatic and haemostatic characteristics, in addition to its adhesive properties. At present, its synthesis is performed with good yields via Knoevenagel condensation using conventional sources of heating, but this requires a long processing time. The aim of this work was to look for a new way of synthesising *n*-butyl cyanoacrylate using microwave irradiation as the source of heating. This non-conventional source of heating most likely reduces the process time of the synthesis. In comparison with a conventional heating source, such as an oil bath, the results showed the advantages of this method whereby the *n*-butyl cyanoacrylate gave the same yield and quality with a reduction in the reaction time by a factor of 3–5-fold.

Keywords: *n*-butyl cyanoacrylate; poly (*n*-butyl cyanoacrylate); microwaves irradiation

N Butyl Cyanoacrylate Synthesis A New Quality Step Using

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Decoding **N Butyl Cyanoacrylate Synthesis A New Quality Step Using**: Revealing the Captivating Potential of Verbal Expression

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