

A polarographic study of the photodegradation of nitrendipine

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Nitrendipine produces a well-defined polarographic peak due to the four-electron reduction of the nitro group. This peak is used for tracking the photodecomposition of nitrendipine in both UV light and daylight conditions. The results show that nitrendipine remains unaltered in the short time scale of a normal analytical procedure and no special care with visible light exposure is necessary.

However nitrendipine is strongly altered with UV irradiation showing a first-order degradation kinetics. A degradation rate constant of 0.0665 min^{-1} with a $t_{1/2}$ of 10.423 min has been obtained.

The UV degradation product was isolated and identified as the nitro pyridine analogue of nitrendipine. © 1990.