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# Fast polymerization at low temperature of an infrared radiation cured epoxy-amine adhesive

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## Highlights

Infrared radiation provides a substantial decrease in the cure time.

Under Infrared, a non-thermal effect can be highlighted at low temperature.

It arises from the absorption of infrared radiation by epoxy groups.

It promotes only reaction between epoxy groups and primary amines.

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## Abstract

In the industry, the cure time of two-component adhesives is very important for a cost-effective manufacturing. Too fast, it does not favor the application of the product and the control of bonded joints. Too slow, it leads to long process times and too high process costs. The best compromises are two-component adhesives that cure slowly at room temperature and can reach full polymerization in minutes, on

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