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[\[PDF \(2722K\)\]](#) [\[References\]](#)**Color change capacity of dental resin mixed with silver methacrylate caused by light irradiation and heating**[Koichi YOSHIDA](#)¹⁾, [Harumi AOKI](#)¹⁾ and [Takaichi YOSHIDA](#)¹⁾

1) Department of Dental Materials Science, School of Life Dentistry at Tokyo, The Nippon Dental University

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Abstract:

We synthesized silver methacrylate, added it to resin for dental use, and observed color changes in the resin from colorless to red-purple following light irradiation. Therefore, 0.01-0.10 wt% silver methacrylate was added to two types of resin powder, *i.e.*, self-curing resin produced by the polymerization of a barbituric acid derivative, quaternary ammonium, and an organometallic compound (Type I), and BPO-tertiary amine resin (Type II), and samples were produced by polymerization with the attached monomer. Changes with time in the color of samples from 3 hours (new samples) to 16 days (old samples) after polymerization and also color changes of old and new samples after heating were evaluated. Subsequently, changes in color with variations in the light intensity, irradiation time, and wavelength were evaluated in terms of color differences.

Key words:[Self-curing resin](#), [Color change](#), [Silver methacrylate](#)[\[PDF \(2722K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)[RIS](#)[BibTeX](#)

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