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[\[PDF \(1960K\)\]](#) [\[References\]](#)**Effect of self-cured acrylic resin added with an inorganic antibacterial agent on *Streptococcus mutans***[Kenjiro KUROKI](#)¹⁾, [Tatsuhide HAYASHI](#)¹⁾, [Keiko SATO](#)²⁾, [Takafumi ASAI](#)¹⁾, [Masashi OKANO](#)¹⁾, [Yoshiko KOMINAMI](#)¹⁾, [Yoshifumi TAKAHASHI](#)¹⁾ and [Tatsushi KAWAI](#)¹⁾

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Abstract:

In order to develop a self-cured acrylic resin having an antibacterial property, three types of commercially available inorganic antibacterial agents were added, at 1% each, to UNIFAST III to evaluate the antibacterial property. The antibacterial test evaluated the amount of *Streptococcus mutans* attached to UNIFAST III, the residual viable count of *Streptococcus mutans* cultured on UNIFAST III. And the color tone changes evaluated immediate and temporal color tone changes of UNIFAST III caused by the addition of antibacterial agents. As a result, compared to UNIFAST III without any added inorganic antibacterial agent, a significant decrease was observed in the attachment amount and the residual viable count of *Streptococcus mutans*. In addition, when adding NOVARON from among the added inorganic antibacterial agents, UNIFAST III exhibited little change in the temporal color tone. Thus, these results suggest that the addition of antibacterial agents to resins is an effective first step toward developing self-cured acrylic resins having an antibacterial property.

Key words:[Self-cured acrylic resin](#), [Inorganic antibacterial agent](#), [Antibacterial property](#)[\[PDF \(1960K\)\]](#) [\[References\]](#)

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