

Author: Keyword:

Search

ADVANCED

[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

ONLINE ISSN : 1882-4935

PRINT ISSN : 0914-3319

Journal of Printing Science and Technology

Vol. 42 (2005) , No. 4 pp.220-229

[\[PDF \(1116K\)\]](#) [\[References\]](#)**Study on Characteristics of Paper and Polymerization Behavior of Acrylate Resins Irradiated by Electron Beam**Naoko FUJISAWA¹⁾ and Eiji KAWAMURA¹⁾

1) Research Institute, National Printing Bureau, Incorporated Administrative Agency

Abstract

The curing behavior of acrylate was examined by using an ultra low energy electron beam irradiation device with 40-60keV which was developed in recent years. The cured film was formed with the high conversion rate and the shrinkage was little. Moreover, physical properties of the cured film were studied by using the SAICAS method. As a result, it was confirmed that strong film was formed, in which hardness is high in the vicinity of the surface and low inside the film. The deterioration behavior of the form under the ultra low energy electron beam irradiation was also clarified. It is concluded that the curing process by using the ultra low energy electron beam is useful in the print field.

[\[PDF \(1116K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)[RIS](#)[BibTeX](#)

To cite this article:

Naoko FUJISAWA and Eiji KAWAMURA, Journal of Printing Science and Technology, **42**, 220 (2005) .

JOI JST.JSTAGE/nig/42.220

Copyright (c) 2008 The Japanese Society of Printing Science and Technology

