

**WATER SUBSTITUTES TO METHANOL PRE  
COAGULANT FOR NATURAL LATEX GLOVE  
MANUFACTURING**

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## Abstract

In glove manufacturing used such kind of chemicals methanol, ethanol, Acetic acid and toluene. Methanol has a high toxicity in glove manufacturing industry. The study was carried out to select the best substitute for the methanol. The tap water is used substitute for methanol. A glove handling that is flexible and lightweight comprises a cured, liquid-impervious polymeric latex shell. A tacky acrylic adhesive with low shear strength can be used. The aqueous latex emulsion may comprise additives, including viscosity modifiers, waxes, surfactants, stabilizers, cross-linking agents and the like, to produce a cured latex product having specific characteristics, such as thickness, tensile strength, tear and penetration resistance, flexibility; etc.

The research was conducted polyester shell (4 yarns) with changing calcium ( $\text{Ca}(\text{NO}_3)_2$ ) concentration (0.5 % to 3 %) with constant water. Process for producing these supported gloves includes the use of a shell, which is dressed over a former (KBM), optionally treated with a coagulant, and pre coagulant dipped into calcium water and allowed to dwell for optimum time to build-up desired thickness. keep air time then dipped into latex compound to form a coagulant latex layer over the shell, which is then cured the laboratory oven in Temperature between  $95^\circ\text{C}$  and  $110^\circ\text{C}$ . The penetration of the compound latex dressed shell results in "strike-through," or "penetration," which creates an unsightly appearance of the supported product, discomfort on the bare hand, and makes the article more rigid and less flexible.

At the end of the develop calcium water pre coagulant gloves were compare with standard value of Abrasion, Cut, Tear, punch and visual inspection.