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**A study of Developing a General Purpose Adhesive
Based on Polyvinyl Acetate
From the Vinyl Acetate Monomer**

By

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ABSTRACT

A study of developing a general purpose adhesive based on polyvinyl acetate from the vinyl acetate monomer.

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Emulsion polymerization was carried out to get a homogeneous polymer dispersion of having deserved characteristics.

Eighteen trails had been carried out by changing the chemical composition, feeding procedure and temperature.

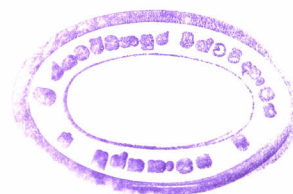
Selected testing parameters which were viscosity, particle size distribution, free monomer content and texture of the emulsion had been done initially for each trial to evaluate the product.

The balance tests which were solid content, pH, bulk density, free from staining, stability at 37 °C, braking load, and resistant to sustained load, which were specified in Sri- Lankan standard has been carried out only for equivalent sample to the control sample.

It has been observed that slight changes in initiator concentration has a major effect on the efficiency of polymerization and also discovered that best temperature for the polymerization was 60 °C.

The feeding procedure and the surfactant quantity and the method of adding it, showed a big impact on particle size distribution.

It has been showed that feeding procedure , grade of chemicals and the temperature were very important for both stability and the performance of the final product.



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