

*Research Paper*

## **Studies in Optimization of Aqueous Film Coating Parameters**

**Navin Sheth<sup>1</sup>, Sunny Shah<sup>1</sup>, Arti Potdar<sup>2</sup> and Anand Shah\***

<sup>1</sup>K.N.V Pharmacy College, Rajkot, India.

<sup>2</sup>Formulation and Development Department, Zydus Cadila Health Care Ltd., Ahmedabad, India.

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**ABSTRACT:** The purpose of this research was to study the aqueous-based film coating of tablets utilizing a laboratory-scale side-vented perforated pan-coating apparatus. The process parameters of potential importance with respect to the final film quality were evaluated by using trial and error method. Tablets were evaluated for coating uniformity (mg), coating process efficiency (%), surface roughness, and %LOD (loss on drying). Spray rate and inlet air temperature both affect the all characteristic of coated tablets. Rotating speed of pan mainly affect the coating uniformity of tablets. % Solid content affects the surface of coated tablets and also creates a problem in spray flow. The process parameters relevant to a side-vented perforated pan coating process can be identified and, consequently, optimized.

**KEYWORDS:** Aqueous film coating; Coating uniformity; Coating process efficiency; Perforated pan coating.

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