

Recommended Solvent System and Reconstitution Level

Purified water at up to 20% w/w solids

Equipment / Accessories

Variable-speed mechanical stirrer

Mixing Vessel

Calculation of Instacoat P4 and solvent quantities

Determine the quantities of Instacoat P4 (20% w/w solids) and water required based on the quantity of tablets to be coated and the target coating weight gain. e.g.: For coating 1.0 kg of tablets to 3% wt. gain, weigh 33 g Instacoat and 132 gm purified water at room temperature (includes 10% overage for losses)

Reconstitution Process

Add the weighed quantity of water to a mixing vessel.

Using a mechanical stirrer, stir the purified water to form a vortex

Add required quantity of Instacoat P4 to the centre of the liquid vortex in a slow steady stream, avoiding clumping while maintaining a vortex. Once the entire quantity of Instacoat has been added, reduce the stirrer speed to eliminate the vortex. Continue mixing for 45 minutes.

Recommended Process Conditions

Parameters	Side-vented (fully perforated) pans	Conventional (non perforated) pans
Pan diameter (inch)	24-60	12-36
Tablet load (kg)	10-300	0.5-50
Weight gain (%)	2.0 - 3.0%	
Number of guns	1-6	1
Liquid nozzle diameter (mm)	1.0 - 1.2	
Atomising air pressure (bar)	3.0 - 4.0	
Pattern air pressure	To achieve maximum uniform bed coverage	
Tablet bed temperature (°C)	37 - 40	
Inlet air temperature (°C)	Set to achieve required product bed temperature	
Suspension spray rate	Set to achieve required product bed temperature	
Exhaust air volume	To maintain slight negative pressure in pan	
Pan speed	Minimum for steady tablet flow through spray zone	

*Tablet bed temperature offers the most effective way of controlling the coating process. Where this measurement is unavailable, exhaust temperature may be substituted. However, the relationship between the two measurements is complex and depends on several factors such as pan load, pan depression, pan design and airflow rate. Indicated exhaust temperature may be above or below the true bed temperature. It is recommended that the relationship between the two measurements is calibrated.

Typical Constituents

Non-cellulosic water-soluble polymer(s); Plasticiser; Opacifier; Pigments; Glidant; Microbiological Preservative.