

Recommended Solvent System and Reconstitution Level

Purified water at up to 7% w/w solids

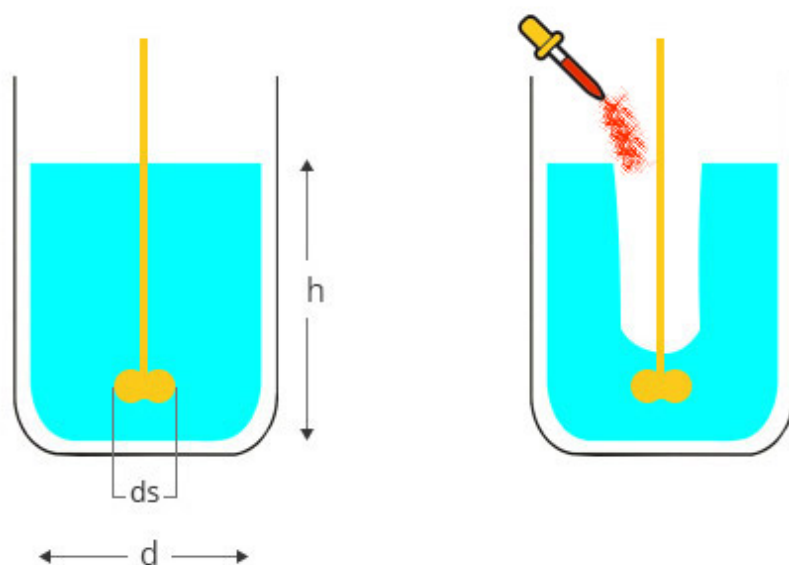
Organic: IPA 35% + MDC 65% w/w at up to 5% solids

Hydro-alcoholic: Water 15% + IPA 85% w/w at up to 5% solids

Equipment / Accessories

Variable-speed mechanical stirrer

Mixing Vessel



Calculation of Instaglow and solvent quantities

Determine the quantities of Instaglow (7% 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 0.2% wt. gain, weigh 2.2 g Instaglow and 29.2 gm purified water at room temperature (includes 10% overage for losses)

Determine the quantities of Instaglow (5% w/w solids) and IPA 35% + MDC 65% 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 0.2% wt. gain, weigh 2.2 g Instaglow and 41.8 gm IPA 35%+ MDC 65% at room temperature (includes 10% overage for losses)

Determine the quantities of Instaglow (5% w/w solids) and Water 15% + IPA 85% 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 0.2% wt. gain, weigh 2.2 g Instaglow and 41.8 gm Water 15% + IPA 85% at room temperature (includes 10% overage for losses)

Reconstitution Process

Instaglow (Aqueous)

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 Instaglow to the centre of the liquid vortex in a slow steady stream, avoiding clumping while maintaining a vortex. Once the entire quantity of Instaglow has been added, reduce the stirrer speed to eliminate the vortex. (Fig. 2) Continue mixing for 45 minutes.

Instaglow (Organic)

Add the weighed quantity of organic solvent to a mixing vessel.

Using a mechanical stirrer, stir the organic solvent to form a vortex.

Add required quantity of Instaglow to the centre of the liquid vortex in a slow steady stream, avoiding clumping while maintaining a vortex. Once the entire quantity of Instaglow has been added, reduce the stirrer speed to eliminate the vortex. (Fig. 3) Continue mixing for 45 minutes.

Instaglow (hydro alcoholic)

Add the weighed quantity of hydro alcoholic solvent to a mixing vessel.

Using a mechanical stirrer, stir the hydro alcoholic solvent to form a vortex.

Add required quantity of Instaglow to the centre of the liquid vortex in a slow steady stream, avoiding clumping while maintaining a vortex. Once the entire quantity of Instaglow has been added, reduce the stirrer speed to eliminate the vortex. (Fig. 4) Continue mixing for 45 minutes.

Recommended Process Conditions

	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 (%)	0.2%	
Number of guns	1-6	1
Liquid nozzle diameter (mm)	1.0-1.2	
Atomising air pressure (bar)	2.5-3.5	
Pattern air pressure	To achieve maximum uniform bed coverage	
Tablet bed temperature, Aqueous (°C)	40-45	
Tablet bed temperature, Organic (°C)	34-38	
Tablet bed temperature, Hydro-alcoholic (°C)	36-40	
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

HPMC; PEG 6000; Glycerine; PVA; Glidant.