

Recommended Solvent System and Reconstitution Level

Purified Water at up to 20% w/w solids

IPA at up to 10% w/w solids

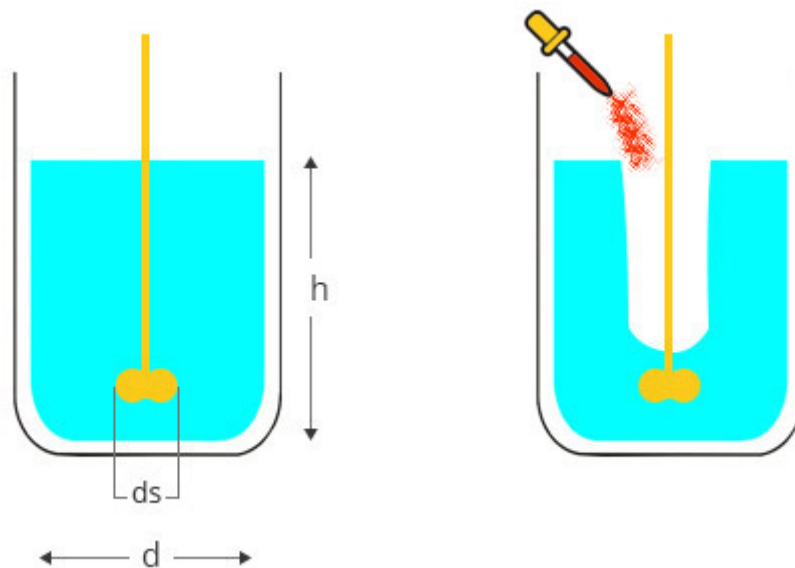
90% IPA + 10% Purified Water at up to 10% solids

Please note that different formulations are provided according to the chosen solvent system. The individual formulations are not interchangeable between solvents.

Equipment / Accessories

Variable-speed mechanical stirrer

Mixing Vessel



Calculation of Instacoat EN-SUPER IV and solvent quantities

INSTACOAT EN-SUPER IV (Aqueous):

Determine the quantities of INSTACOAT EN-SUPER IV (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 8% wt. gain, weigh 88 g Instacoat and 352 g purified water at room temperature (includes 10% overage for losses)

INSTACOAT EN-SUPER IV (Organic):

Determine the quantities of INSTACOAT EN-SUPER IV (10% w/w solids) and IPA 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 8% wt. gain, weigh 88 g Instacoat and 792 g IPA at room temperature (includes 10% overage for losses).

INSTACOAT EN-SUPER IV (Hydro-alcoholic):

Determine the quantities of INSTACOAT EN-SUPER IV (10% w/w solids) and 90% IPA + 10% Purified 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 8% wt. gain, weigh 88 g Instacoat and 713 g IPA + 79 g Purified Water at room temperature (includes 10% overage for losses).

Reconstitution Process

INSTACOAT EN-SUPER IV (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 Instacoat EN-Super IV 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.

INSTACOAT EN-SUPER IV (Organic)

Add the weighed quantity of Isopropyl Alcohol to a mixing vessel.

Using a mechanical stirrer, stir the Isopropyl Alcohol to form a vortex.

Add required quantity of Instacoat EN-Super IV 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.

INSTACOAT EN-SUPER IV (Hydro alcoholic)

Add the weighed quantity of Isopropyl Alcohol to a mixing vessel.

Using a mechanical stirrer, stir the Isopropyl Alcohol to form a vortex.

Add required quantity of Instacoat EN–Super IV to the centre of the liquid vortex in a slow steady stream, avoiding clumping while maintaining a vortex. Stir for 5 minutes and add the weighed quantity of Purified water. Reduce the stirrer speed to eliminate the vortex. Continue mixing for 45 minutes.

Recommended Process Conditions

	Side-vented (fully perforated) pans			Conventional (non perforated) pans		
	Aqueous	Organic	Hydro- alcoholic	Aqueous	Organic	Hydro- alcoholic
Pan diameter (inch)	24-60			12-36		
Tablet load (kg)	10-300			0.5-50		
Weight gain (%)	8-0 %					
Number of guns	1-6			1		
Liquid nozzle diameter (mm)	1.0-1.2					
Atomising air pressure (bar)	1.5-2.5					
Pattern air pressure	To achieve maximum uniform bed coverage					
Tablet bed temperature (°C)	33-36	30-33	32-35	33-36	30-33	32-35

Inlet air temperature (°C)	Set to achieve required product bed temperature
Suspension spray rate	Set to achieve required product bed temperature
Inlet air volume	Set to achieve required 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

Aqueous solvent: Methacrylic Acid Co-polymer Type C; Plasticiser; Titanium Dioxide; Edible Pigments; Glidant, Alkaliser, Surfactant