
SPRAYCEL* COATINGS
"Excellent Quality Consistency with
Time and Cost Savings"

AN ISO 9001-2015 COMPANY
US DMF NUMBER AVAILABLE
GMP, KOSHAR, HALAL CERTIFIED

ABOUT US

SPRAYCEL is a homogeneous ready mix for coating of tablets, granules, powder and pellets. SPRAYCEL consists of all necessary ingredients such as polymers, pigments, opacifier, glidents, binders, colours and extenders. We provide tablet coating material for Pharmaceutical, Ayurvedic, Nutraceutical and Herbal Industry in India and abroad since 1990. We are situated at Ahmedabad having state of the art plant to manufacture Ready Mix tablet coating material. Each SPRAYCEL formulation is custom made to suit the individual needs of the customer for the grade of the polymer, choice of plasticizers and pigments. It can be reconstituted with Aqueous system,

SPRAYCEL is an equipment friendly and robust formula which can be used with ease on conventional as well as advanced coating machines. The physico-chemical properties of SPRAYCEL measures well up to International Standards. We have the vision to become one of the leading manufacturer of coating polymer by the quality of products, services and innovation through continuous research work. We are committed to manufacture and supply quality products by CGMP standards and specifications with effective SOPs to ensure consistent high quality output. Our excellent colour matching systems for batch to batch ensure consistency in colour and performance.

SPRAYCEL is well backed up with all necessary Technical Services to Customer using a process of continuous on-site Interaction & Dialogue. The Techno - Marketing team provides on-site trials and technical services to prospective and regular customers for Pilot and commercial scale level operations, also assisting in all trouble shooting whenever essential.

KEY FACTORS FOR GOOD FILM COATING EQUIPMENTS/ACCESSORIES

- Pan size, shape, baffles and angle
- Spray nozzle diameter, air cap design
- Drying air system
- Exhaust air system
- A slight negative pressure inside pan
- Stirring mechanism for bulk suspension
- Good air handling unit for the area
- Flame and explosion proofing where necessary

TABLETS

- High hardness
- Low friability
- Good surface adhesion property

COATING SUSPENSION

- Stir 40-50 mins. prior to spraying
- Low particle size of suspended pigments & opacifiers
- Low settling rates
- Good flowability

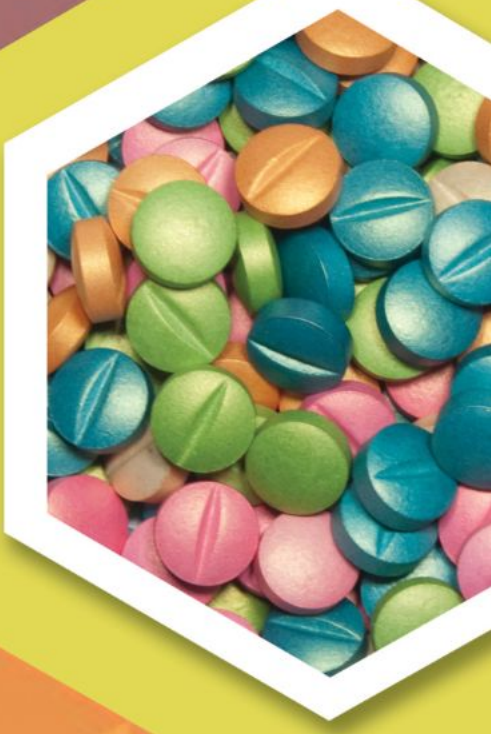
PROCESS VARIABLES

Tablet load size

- Pan RPM
- Quantity and Temp. of drying air
- Quantity and Temp. of exhaust air
- Tablet bed Temp. profile
- Atomisation pressure
- The spray rate
- The spray pattern – The spray distance

LIST OF PRODUCTS

- Express Film Coating
- Fast Sugar Film Coating
- Tio2 Free Coating
- Moisture Barrier
- Special Sweet Coating
- Flavoured Film Coating
- Pearl Coating
- Enteric Coating
- Precoat
- Seal Coating



SUGGESTED FILM COATING PARAMETERS

(Aqueous/Hydro alcoholic Solvent based)

For Aqueous Systems: 12-15 % w/w

For Hydro alcoholic Systems: 8 – 10%w/w

Parameters	12" Conventional Pan	24" Auto Coater	36" Conventional Pan	48" Auto Coater	60" Auto Coater
Tablet load (8-10 mm dia) round biconvex	900 gms	10 Kgs	45Kgs	100Kgs	160Kgs
Pan RPM	33-36	18-26	12-16	5-8	3-6
Dry Air Qty & Temp.	80-100 cfm 50° -60°C	250cfm 60°-70°C	500cfm 60°-70°C	1250cfm 60°-70°C	3000cfm 65°-75°C
Exhaust Air Qty. & Temp.	150cfm 30°-35°C	500cfm 32°-35°C	900-1000cfm 35°-38°C	2500-2750cfm 35°-38°C	5000cfm 35°-40°C
Spray Atom Press	40-50psig	40-60psig	60-70psig	70-90psig	90-115psig
No. of Spray Guns	ONE	ONE	ONE	THREE-FOUR	FIVE-SIX
Nozzle Dia	1.5mm	1.5mm	1.8mm	1.5-1.8mm	1.0-1.5mm
Weight Gain	2-3%	2-3%	2-3%	2-3%	2-3%
Spray Cycle	Continuous	Continuous	Continuous	Continuous	Continuous
Spray Rate/Min.	3-4g/min	20g/min	60-80g/min	100-120g/min	125-150g/min
Total Suspension Sprayed.	220gms	2.40kgs.	10.8kgs.	24kgs.	38.400kgs.
Total Process Time	50min	2hrs	2-2.5hrs	4hrs	5-6hrs

Spraycel can be used in any coating machines such as Conventional Coating Pan, Autocoater (like Ganson, Neo coata, Accella Coata etc.) and Fluid Bed Coater.

TROUBLE SHOOTING DURING FILM COATING

FILM CHIPPING	● Low film strength	● Increase film former Concentration
	● Inadequate plasticizer	● Increase plasticizer Concentration
	● High pan rpm	● Reduce pan rpm
	● Low spray rate	● Increase spray rate Dilute Coating Suspension
	● Very sharp Tablet edges	● Redesign Tablet Tooling

FILM PEELING	● Very high spray rate	● Reduce spray rate
	● Low dry air Temp	● Increase Temp.
	● Sticky films	● Add/increase anti adherents.
	● Lack of adhesion to Tablet surface	● Add/include fillers like MCC or HPC in Tablet cores

ORANGE PEEL APPEARANCE	● Spray drying	● Increase solvents concentration, reduce atomisation pressure and readjust spray distance.
	● Fast drying rate	● Reduce Qty/or Temp.of dry air
	● High atomization pressure	● Reduce atomization pressure

BRIDGING (Across Logos, Wedges, break -lines etc.)	● High spray rate coupled with equally fast drying	● Control spray rate and drying rate (This will be indicated by a lowering of Tablet bed temp.)
	● Deep wedges on Tablets	● Redesign tablet tooling to avoid this

ANAND ENTERPRISE

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