Colorco

Complete Film Coating System

OPADRY[®]

Coating Parameters – Aqueous Formulas

Opadry®, complete film coating system, is a one-step product combining polymer, plasticizer and pigment, as required, in a dry concentrate. It provides excellent film forming capabilities including sharp logo definition, high tensile strength and good adhesion properties

The coating parameters listed in the table below are based on Colorcon data. Individual product and machine functions should be taken into account and conditions altered as required.

| | | Fully Perforated Side Vented Coating Pan | | | | Conventional Par |
|------------------------------|----------------|------------------------------------------|-----------------------------|------------------------------|----------------|------------------------|
| Bar Bisserter | cm | 38.1 | 60.96 | 122 | 152.4 | 40.64 |
| Pan Diameter | in | 15 | 24 | 48 | 60 | 16 |
| | | | Solution Prepara | tion | | |
| Solvent | | Purified Water | Purified Water | Purified Water | Purified Water | Purified Water |
| Solids Content | % w/w | 15** | 15** | 15** | 15** | 15** |
| | | | Run Objective | s | | 1 |
| Theoretical Weight Gain | % w/w | 3 | 3 | 3 | 3 | 3 |
| Tablet Charge [†] | kg^{\dagger} | 1.5 - 3.0 | 12 - 15 | 120 - 160 | 320 - 350 | 3 |
| | | | Gun Configurat | ion | | |
| Example Spray Gun | type | Schlick 931/7-1 S22 | Spraying Systems 1/8 VAU | Schlick 931/7-1 S35 (ABC) | Manesty | Schlick 970/7-1 S75 |
| Number of Guns | guns | 1 | 1 - 2 | 3 – 4 | 5 - 6 | 1 |
| Nozzle | mm | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| Diameter | in | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| Gun to Bed Distance | cm | 10 | 17 | 25 | 25 | 15 |
| | in | 4 | 7 | 10 | 10 | 6 |
| Gun to Gun Distance | cm | N/A | 10 | 15 | 15 | N/A |
| | in | N/A | 4 | 6 | 6 | N/A |
| Atomizing Air | bar | 1.4 | 1.7 | 2.5 | 2.5 | 1.4 |
| Pressure | psi | 20 | 25 | 36 | 36 | 20 |
| Pattern Air | bar | 1.4 | 1.7 | 2.5 | 2.5 | 1.4 |
| Pressure | psi | 20 | 25 | 36 | 36 | 20 |
| | | | Process Parame | ters | | I |
| Drying Air Volume | cu.m/hr | 250 - 290 | 424 - 470 | 2300 - 3060 | 5440 - 6630 | 140 |
| | cu.ft/min | 147 - 175 | 250 - 275 | 1350 – 1800 | 3200 - 3900 | 80 |
| Pan Speed* | rpm* | 18 | 14 | 8 | 6 | 20 |
| Pre-warm | °C | 45 - 50 | 45 - 50 | 45 - 50 | 45 - 50 | 45 - 50 |
| Tablet Bed | °F | 113 - 122 | 113 - 122 | 113 - 122 | 113 - 122 | 113 - 122 |
| Inlet Air Temperature | °C | 60 | 65 | 65 | 65 | 65 |
| | °F | 140 | 149 | 149 | 149 | 149 |
| Tablet Bed Temperature | °C | 42- 45 | 42- 45 | 42- 45 | 42- 45 | 42- 45 |
| | °F | 113 - 118 | 113 - 118 | 113 - 118 | 113 - 118 | 113 - 118 |
| Spray Rate | g/min | 10-18 | 40-56 | 260 - 420 | 650-700 | 12 |
| Approximate Coating Times | min | 17-60 min | 43-75 min | 57-123 min | 91-108 min | 50 min |

type in the pan. **Recommended for pigmented formulations. For clear formulations, we recommend 5-10% solids.

[†]Tablet charge is dependent on tablet size and shape.

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