MO-S-003-02-11/11/62

Prepared by Checked by Approved by

| Froduct Name | | | CONTROL PLAN | | | | | | | | Териге | u by Check | Approved by | | |
|--------------------|--------------------------|---|---|-----------------|----------------|---------------|-----------------------|--|----------------------------|--------|--------|--|--|--------------------|--|
| Colour Masterbatch | | | DO NOT C | | | | | | | | | | | | COPY |
| _ | Proces s Flow Main | Process Name/ Operation Description | Machine,Device, Jig,Tools For Manufacturing | Characteristics | | | Specia | Methods | | | | | | igis | |
| Process Number | | | | No. | . Product | Drocoss | rocess Char. Class | Product/Process Specification/Tolerance | Evaluation Measurement | Sample | | Control Method | | Responsibi lity | Reaction plan |
| | | | | INO. | Troduct | 1100033 | | | Technique | Size | Freq. | Manuf. | Q.C | Res | pian |
| 1 | \Diamond | Incoming | | 01 | Visual Control | | | PigmentFillerAdditive | Code No. Lot. R/M Quantity | 1 | | WH-P-001 WH-F-001 ใบส่งของ Invoice PO COA | | <u>△</u> | Return Supplier / Record Incoming Material (WH-F- 002) |
| | | | | 02 | Weighting | | | <u>+</u> 1% | Scales | 25 kg. | | WH-F-001 | | \triangle | 002) |
| 2 | \Diamond | RM/QC | | 01 | Mixing RM | | | Pigment 0.1 g.Ti02 0.9 g.HPPE 100 g.Zinestearate 0.065 g. | Two roll mill | 1 Ch | Chip | | LA-W-004 LA-S-009 LA-W-032 LA-P-003 | Return | |
| | | | | 02 | Measure △E | | | Delta E 0.5-3.00 | Spectrophotometer | | | | LA-S-003 CIE Lab WH-F-002 Sticker | • | Warehouse R/M |
| 3 | | RM/PREPARATIO N | | 01 | Weighting | | SC | | Scales | 1 | Time | WH-W-003 PL-F-002 PL-F-003 | | \triangle | |
| 4 | | Mixing | High Speed Mixer | 01 | Mix | | | Amp Meter 20-40 Amp. | High Speed Mixer | 1 | Time | PD-P-001 PD-P-002 PD-W-038 PD-W-039 PD-F-009 PD-F-024 PD-F-026 PD-F-033 PD-F-035 PD-F-041 PD-S-002 PL-F-002 | | | Rerun Process |
| 5 | | Extrusion | Twin Screw Extruder | 01 | Extrude | 8 Lan Operato | | Temperature Min 100 °C Temperature Max 300 °C Production (| | 1 | Time | PD-P-001 PD-P-002 PD-W-045 PD-W-056 PD-F-010 PD-F-011 PD-F-016 PD-F-024 PD-F-034 PD-S-002 PL-F-002 | | | Rerun Process |

Responsibility symbol ; \triangle = Warehouse Operator

Product Name

▲ = Warehouse Manager = =

= QC & Lap Operator= QC & Lap Manager

□ = Production Operator■ = Production Manager

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| Colour Masterbatch | | | CONTROL PLAN | | | | | | | | | | | | COPY |
|--------------------|--------------------|-----------------------|--------------------------------|-------------|------------------------------|----------------|------------|-------------------------|---------------------------------------|--------|-------|---|--|--------------------|---|
| | Proces | Process Name/ | Machine, Device, | | Characteri | istics | Specia | | Methods | | | | | • | Reaction plan |
| Process Number | s Flow Main | Operation Description | Jig,Tools For Manufacturing | No. Product | | Process | l Char. | Product/Process | Evaluation | Sample | | Control Method | | Responsibi lity | |
| | | | | NO. | Product | Process | Class | Specification/Tolerance | Measurement Technique | Size | Freq. | Manuf. | Res 2.D | Res | pian |
| 6 | | Pelletizing | Pelletizer | 01 | Visual Control | | | N-A | • Speed 300-1,300 rpm | N/A | N/A | PD-W-001 | | | Rerun Process |
| 7 | \rightarrow | Final Test | est | 01 | Delta E (Color Shade) | | SC | 0.5-3.00 | Spectrophotometer | | | | LA-P-003 LA-W-040 LA-W-041 | | Adjust |
| | | | | 02 | Dispersion | | | Visual | Micoscope | | | | CIE Lab LA-W-020 LA-W-031 | 0 0 | Rerun LA-F-006 (QC- Report) Add Rerun By Bland |
| | | | | 03 | Homogeneity Contamination | | | Visual | Magnifier | | | | LA-F-006 LA-F-003 LA-F-005 | | |
| | | | | 04 | Moisture | | | ≤ 0.2 % | KARL FISCHER MOISTURE BALANCE | | | | LA-W-019 Sticker | 1 | |
| | | | | 05 | Bulk Density test | | | Customer STD Spec | Bulk Density | 1 | Chip | | LA-W-006 LA-W-005 | | |
| | | | | 06 | Density test | | | Customer STD Spec | • Density | | | | LA-W-026 LA-W-009 LA-W-039 LA-S-011 ISO18553 (AS DINEN- | | |
| | | | | 07 | Ash Conten | | | Customer STD Spec | Furnance | | | | | | |
| | | | | 08 | Additive Conten | | | Customer STD Spec | • HPLC | | | | | | |
| | | | | 09 | Filter Value | | | Customer STD (< 2 bar) | Filter test | | | | 13900-6) | 0-6) | |
| | | | | 10 | Dispersion Index | | | Visual | Film Blowing | | | | | | |
| | | | | 11 | OIT | | | Customer STD Spec | Film Blowing | | | | | | |
| 8 | | Packing | | 01 | Weighting | | | 10 g. | Scales Visual | 1 | Bag | PD-P-001 PD-P-002 PD-W-028 PD-W-055 PD-F-012 PD-F-018 PD-F-021 PD-F-023 PD-F-030 Sticker | | | Rework |
| Pospon | aibility ov | mbol · | house Operator | | 0.00 | & Lan Onerator | | = Production (|) Dorotor | | I | Guonei | I | | |

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Product Name

▲ = Warehouse Manager

= QC & Lap Operator= QC & Lap Manager

☐ = Production Operator

= Production Manager