
















Product Name			CONTROL PLAN													ต้นฉบับ	
Black Filler Masterbatch																	
Process Number	Process Flow	Process Name/ Operation Description	Machine,Device, Jig,Tools For Manufacturing	Characteristics			Special Char. Class	Methods						Responsibility	Reaction plan		
	Main			No.	Product	Process		Product/Process Specification/Tolerance	Evaluation Measurement Technique	Sample		Control Method					
1		Incoming		01	Visual Control			<ul style="list-style-type: none">• Pigment• Filler• Additive	<ul style="list-style-type: none">• Code No.• Lot. R/M• Quantity	1	Bag	WH-P-001 WH-F-001 ใบส่งของ Invoice PO COA		 	Return Supplier / Record Incoming Material (WH-F-002)		
				02	Weighting			± 1%	<ul style="list-style-type: none">• Scales	25 kg.						WH-F-001	
2		RM/QC		01	Mixing RM			<ul style="list-style-type: none">• Pigment 0.1 g.• TiO2 0.9 g.• HPPE 100 g.• Zinestearate 0.065 g.	<ul style="list-style-type: none">• Two roll mill	1	Chip		LA-W-004 LA-S-009 LA-W-032 LA-P-003 LA-S-003 CIE Lab WH-F-002 Sticker	 	Return Warehouse R/M		
				02	Measure ΔE			Delta E 0.5-3.00	<ul style="list-style-type: none">• Spectrophotometer								
3		RM/PREPARATION		01	Weighting		SC	<ul style="list-style-type: none">• ± 0.01 kg./60 kg.• ± 0.5 g ./7.5 kg	<ul style="list-style-type: none">• Scales	1	Time	WH-W-003 PL-F-002 PL-F-003		 			
4		Mixing	High Speed Mixer	01	Mix			Amp Meter 20-70 Amp.	<ul style="list-style-type: none">• 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		


Responsibility symbol ; △ = Warehouse Operator
▲ = Warehouse Manager

○ = QC & Lap Operator
● = QC & Lap Manager

□ = Production Operator
■ = Production Manager

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										Size	Freq.	Manuf.	Q.C		
5		Feeder	FARREL	01	Gravimetric Feeder		SC	<ul style="list-style-type: none">Max Load 80%	<ul style="list-style-type: none">Single Screw ExtruderTwin Screw Extruder	1	Time	PD-P-001 PD-P-002 PD-W-065 PD-W-031 PD-F-051 PD-F-011 PD-F-016 PD-F-024 PD-S-002 PL-F-002		<input type="checkbox"/> <input checked="" type="checkbox"/>	Rerun Process
6		Mixing	FARREL	01	Kneader		SC	<ul style="list-style-type: none">Max 750 rpm.	<ul style="list-style-type: none">Twin Screw	1	Time	PD-P-001 PD-P-002 PD-W-065 PD-W-031 PD-F-051 PL-F-002		<input type="checkbox"/> <input checked="" type="checkbox"/>	Rerun Process
7		Extrusion	FARREL	01	Extrude			<ul style="list-style-type: none">1,300-2,700 kg./ Hrs.Temperature Min 100 °CTemperature Max 260 °C	<ul style="list-style-type: none">Single Screw Extruder	1	Time	PD-P-001 PD-P-002 PD-W-065 PD-W-031 PD-F-051 PD-F-011 PD-F-016 PD-F-024 PD-S-002 PL-F-002		<input type="checkbox"/> <input checked="" type="checkbox"/>	Rerun Process
8		Cooling & Pelletizing	Underwater Pelletizer	01	Visual Control			N-A	<ul style="list-style-type: none">Speed 250-4,500 rpm.	N/A	N/A	PD-W-065		<input type="checkbox"/> <input checked="" type="checkbox"/>	Rerun Process

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9		Final Test		01	Delta E (Color Shade)		SC	0.5-3.00	• Spectrophotometer	1	Chip		LA-P-003 LA-W-040 LA-W-041 CIE Lab LA-W-020 LA-W-031 LA-F-006 LA-F-003 LA-F-005	<div><div></div><div></div></div>	AdJUST Rerun LA-F-006 (QC-Report) Add Rerun By Bland
			02	Dispersion		Visual		• Micoscope							
			03	Homogeneity Contamination		Visual		• Magnifier							
			04	Moisture		≤ 0.2 %		• KARL FISCHER • MOISTURE BALANCE	LA-W-019						
			05	Bulk Density test		Customer STD Spec		• Bulk Density	Sticker LA-W-006 LA-W-005						
			06	Density test		Customer STD Spec		• Density	LA-W-026 LA-W-009						
			07	Ash Conten		Customer STD Spec		• Furnance	LA-W-039 LA-S-011						
			08	Additive Conten		Customer STD Spec		• HPLC	ISO18553 (AS DINEN-13900-6)						
			09	Filter Value		Customer STD (< 2 bar)		• Filter test							
			10	Dispersion Index		Visual		• Film Blowing							
			11	OIT		Customer STD Spec		• Film Blowing							

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										Size	Freq.	Manuf.	Q.C		
10		Packing		01	Weighting			10 g.	<ul style="list-style-type: none">• Scales• Visual	1	Bag	PD-W-028 PD-W-055 PD-F-012 PD-F-018 PD-F-021 PD-F-023 PD-F-030 PD-S-002 PL-F-002 Sticker	<div><input type="checkbox"/> <input checked="" type="checkbox"/></div>	Rework	


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