Product Name Additive Filler Masterbatch												Prepared	by Checke	ed by	Approved by	
				CONTROL PLAN									DNC		COPY	
Process	Process Flow		Machine,Device,		Characteris	stics	Special		Method	ls		•	·	sibility	Peaction	
Number	11000	Operation Description	Jig,Tools For Manufacturing	No	Draduat	Drocoo	Char. Class	Product/Process	Evaluation	Sar	nple	Control	Method	bous	plan	
	Main	Description	Manufacturing	No.	Product	Process	Class	Specification/Tolerance	Measurement Technique	Size	Freq.	Manuf.	Q.C	Res		
1	\Diamond	Incoming		01	Visual Control			PigmentFillerAdditive	Code No.Lot. R/MQuantity	1	Bag	WH-P-001 WH-F-001 ใบส่งของ Invoice PO COA		<u>△</u>	Return Supplier / Record Incoming Material (WH-F- 002) Return Warehouse R/M	
				02	Weighting			± 1%	• Scales	25 kg.		WH-F-001		\triangle		
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	Chip		LA-W-004 LA-S-009 LA-W-032 LA-P-003	0		
				02	Measure △E			Delta E 0.5-3.00	Spectrophotometer					LA-S-003 CIE Lab WH-F-002 Sticker		K/IVI
3		RM/PREPARATI ON		01	Weighting		SC	• ± 0.01 kg./60 kg. • ± 0.5 g ./7.5 kg	Scales	1	Time	WH-W-003 PL-F-002 PL-F-003		<u>^</u>		
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-024 PD-F-026 PD-F-033 PD-F-035 PD-F-041 PD-S-002 PL-F-002			Rerun Process	

▲ = Warehouse Manager

● = QC & Lap Manager

= Production Manager

Product Name												Prepared b	y Checke	ked by Approved by			
Addit	ive Filler					CONTROL PLAN					DO	NO	T	COPY			
	Process	Process Name/	Machine, Device,		Characteris	stics	Special		Methods	3				 Responsibility	Desetion		
Process Number	Flow	Operation Description	Jig,Tools For Manufacturing	No.	Droduct	Process	Char. Class	Product/Process	Evaluation	Sar	nple	Control M	1ethod	suod	Reaction plan		
	Main	Description	Manufacturing	NO.	Product	Process	Class	Specification/Tolerance	Measurement Technique	Size	Freq.	Manuf.	Q.C	Res			
5		Feeder	FARREL	01	Gravimetric Feeder		SC	Max Load 80%	Single Screw Extruder Twin Screw Extruder	1	Time	PD-P-001 PD-P-002 PD-W-065 PD-W-031 PD-F-051 PD-F-016 PD-F-024 PD-S-002 PL-F-002		■	Rerun Process		
6		Mixing	FARREL	01	Kneader		SC	• Max 750 rpm.	Twin Screw	1	Time	PD-P-001 PD-P-002 PD-W-065 PD-W-031 PD-F-051 PL-F-002			Rerun Process		
7		Extrusion	FARREL	01	Extrude			• 1,300-2,700 kg./ Hrs. • Temperature Min 100 °C • Temperature Max 260 °C (Temperature ± 20 °C)	Single Screw Extruder	1	Time	PD-P-001 PD-P-002 PD-W-065 PD-W-031 PD-F-051 PD-F-016 PD-F-024 PD-S-002 PL-F-002			Rerun Process		
8		Cooling & Pelletizing	Underwater Pelletizer	01	Visual Control			N-A	• Speed 1,000-3,500 rpr	N/A	N/A	PD-W-065			Rerun Process		

Responsibility symbol ; \triangle = Warehouse Operator

○ = QC & Lap Operator

☐ = Production Operator

▲ = Warehouse Manager

● = QC & Lap Manager

= Production Manager

MO-S-019-01-11/11/62

Product Name												Prepared			Approved by
Addit	ive Filler				CONTROL PLAN							NO	T	COPY	
Process	Process Pr	Process Name/	Machine,Device,		Characteris	stics	Special		Method	ls				Responsibility	Reaction
Number	Flow Main	Operation Description	Jig,Tools For Manufacturing	No.	Product	Process	Char. Class	Product/Process Specification/Tolerance	Evaluation Measurement Technique	Sar Size	mple Freq.	Control Manuf.	Method Q.C		plan
9				01	Delta E (Color Shade)			0.5-3.00	Spectrophotometer				LA-P-003 LA-W-040 LA-W-041		
				02	Dispersion			Visual	Micoscope	1			CIE Lab LA-W-020 LA-W-031	0	AdJUST Rerun LA-F-006
	\Diamond	Final Test		03	Homogeneity Contamination			Visual	Magnifier				LA-F-006 LA-F-003 LA-F-005		(QC-Report) Add Rerun
				04	Moisture	SC	sc	≤ 0.2 %	KARL FISCHER MOISTURE BALANCE		Chip		LA-W-019		By Bland
				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-			
				09 Filter Value			Customer STD (< 2 bar)	• Filter test				13900-6)			
				10	Dispersion Index			Visual	• Film Blowing						
	_			11	OIT			Customer STD Spec	• Film Blowing						

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O = QC & Lap Operator

^{● =} QC & Lap Manager

^{☐ =} Production Operator

⁼ Production Manager

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	Product						T D 0 D 4				Prepared	by Checke	ea by	Approved by	
Additive Filler Masterbatch							CON	TROL PLAN	V			DO	NO	T	COPY
Process	Process Flow	Process Name/	Machine, Device,		Characteris	stics	Special		Method	s		·		Responsibility	Peaction
Number	1 1000	Operation	Jig,Tools For				Char.	Product/Process	Evaluation	San	nple	Control	Method] Š	
	Main	Description	Manufacturing	No.	Product	Process	Class	Specification/Tolerance	Measurement Technique	Size	Freq.	Manuf.	Q.C	Resp	
10		Packing		01	Weighting			10 g.	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			Rework

☐ = Production Operator

= Production Manager

○ = QC & Lap Operator

= QC & Lap Manager

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▲ = Warehouse Manager