Product Name									. •			Prepared	by Checke	d by	Approved by			
Bla	ick Filler M		CONTROL PLAN									NO	Ţ	COPY				
Process	Process Flow	Process Marrie/	Machine, Device,		Characteris	stics	Special		Method	s		·		sibility	Reaction			
Number	Main	Operation Description	Jig,Tools For Manufacturing	No.	Product	Process	Char. Class	Product/Process Specification/Tolerance	Evaluation Measurement Technique	San Size	rple Freq.	Contro Manuf.	Method Q.C	Responsibility	plan			
1	$\Diamond$	Incoming		01	Visual Control			<ul><li>Pigment</li><li>Filler</li><li>Additive</li></ul>	Code No. Lot. R/M Quantity	1	Bag	WH-P-001 WH-F-001 ใบส่งของ Invoice PO COA		<u>△</u>	Return Supplier / Record Incoming Material (WH-F-			
				02	Weighting			± 1%	• Scales	25 kg.		WH-F-001		$\triangle$	002)			
2	$\Diamond$	RM/QC		01	Mixing RM			<ul><li>Pigment 0.1 g.</li><li>Ti02 0.9 g.</li><li>HPPE 100 g.</li><li>Zinestearate 0.065 g.</li></ul>	• Two roll mill	1	Chip		LA-W-004 LA-S-009 LA-W-032 LA-P-003	0	Return Warehouse			
_		, 20		02	Measure △E			Delta E 0.5-3.00	Spectrophotometer		Op		LA-S-003 CIE Lab WH-F-002 Sticker		R/M			
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		$\triangle$				
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-033 PD-F-035 PD-F-041 PD-S-002 PL-F-002			Rerun Process			

Responsibility symbol :  $\triangle$  = Warehouse Operator

▲ = Warehouse Manager

○ = QC & Lap Operator

● = QC & Lap Manager

☐ = Production Operator

= Production Manager

Product Name												Prepared	epared by Checked by Appro		
Bla	ick Filler M	lasterbatch					CON	ITROL PLAI	N			DO	NO	T	COPY
Process	Process Flow		Machine, Device,		Characteris	stics	Special		Methods	8				sibility	Reaction
Number	Main	Operation Description	Jig,Tools For Manufacturing	No.	Product	Process	Char. Class	Product/Process Specification/Tolerance	Evaluation Measurement Technique	San Size	rple Freq.	Contro Manuf.	l Method Q.C	Responsibility	plan
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-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	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 250-4,500 rpm.	N/A	N/A	PD-W-065			Rerun Process

Responsibility symbol ;  $\triangle$  = Warehouse Operator

▲ = Warehouse Manager

= QC & Lap Operator= QC & Lap Manager

□ = Production Operator■ = Production Manager

Product Name							221	ITDOL DI AI	. •			Prepared			Approved by
Bla	ck Filler N		CONTROL PLAN										T	COPY	
Process	Process Flow	Process name/	Machine, Device,		Characteris	stics	Special		Method	ls				Responsibility	Reaction
Number	1 IOW	Operation Description	Jig,Tools For Manufacturing	No.	Product	Process	Char. Class	Product/Process	Evaluation Measurement	Sar	nple	Contro	Method	suod	plan
	Main	Bocompaion	Wandidotainig	140.	Troduct	1 100033	Oldoo	Specification/Tolerance	Technique	Size	Freq.	Manuf.	Q.C	Res	
9				01	Delta E (Color Shade)			0.5-3.00	Spectrophotometer				LA-P-003 LA-W-040 LA-W-041		
				02	Dispersion		SC	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			≤ 0.2 %	KARL FISCHER     MOISTURE     BALANCE		Chip		LA-W-019		By Bland
													Sticker		
				05	Bulk Density test			Customer STD Spec	Bulk Density				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						

Responsibility symbol ;  $\triangle$  = Warehouse Operator

○ = QC & Lap Operator ▲ = Warehouse Manager

☐ = Production Operator = Production Manager

● = QC & Lap Manager

MO-S-016-01-11/11/62

Product Name												Prepared	by Checke	d by	Approved by
Blac	ck Filler M	asterbatch					CON	ITROL PLAI	N			DO	NO	T	COPY
Process	Process Flow	Process Name/	Machine, Device,		Characteri	stics	Special		Method	ds				Responsibility	Reaction
Number	FIOW	Operation	Jig, I ools For			Cha	Char. Product/Process	Evaluation	Sar	nple	Control	Method		plan	
	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		<b>□</b>	Rework
Respon	sibility sy		rehouse Operator rehouse Manager			C & Lap Ope C & Lap Mar		<ul><li>□ = Production</li><li>■ = Production</li></ul>							