Product Name			PR	OCESS FLOW CHART	ต้นฉบับ	
Filler Masterbatch		VIVOVOD D				
Step	Graphical Symbol	Process Name	Equipment	Key Product & Key Control Characteristics	Corrective Action	
		Start				
1		Raw Material Received	Scales	 Code No., Quantity Weighting ± 1 % / Container 	Return Supplier / Record Incoming Material (WH-F-002)	
2		Incoming Inspection	Two Roll Mill	• Mixing RM Temperature 120-300 °C	Report To Warehouse	
			Spectrophotometer	• Delta E (Color Shade) 0.5-3.00		
3		Material Preparation	Scales	• Weighting ± 0.5 g./ 7.5 kg.		
				• Weighting \pm 0.01 kg./ 60 kg.		
4		Mixing	High Speed Mixer	• Max 100 kg./ Batch		
				• Amp Meter 20-70 Amp.		
5		Feeder	Gravimetric Feeder	• Max Load 80%		
6		Mixing	Kneader	• Max 625 rpm.		
7		Extrusion	Single Screw Extruder	• 1,300-2,500 kg./ Hrs.	Rerun Process	
				• Temperature 100-250 °C		
		Extrusion	Twin Screw Extruder	• 700-1,000 kg./ Hrs.	Rerun Process	
				• Temperature 150-260 °C		

Product Name			DD.	OCESS ELOW CHADT		
Filler Masterbatch		PROCESS FLOW CHART				
Step	Graphical Symbol	Process Name	Equipment	Key Product & Key Control Characteristics	Corrective Action	
8		Cooling & Pelletizing	Underwater Pelletizer	• Speed 1,000 - 2,900 rpm. • Speed 600 - 850 rpm.	Rerun Process	
9		Final Inspection	Spectrophotometer Microscope Magnifier Karl Fischer Moisture Balance Bulk Density Tester Density Tester Furnance High Performance Liquid Chromatography (HPLC) Filter Test Film Blowing Differential Scanning Calorimeter (DSC)	 Delta E (Color Shade) Dispersion Homogeneity Contamination Moisture Bulk Density Density Ash Content Additive Content Filter Value Dispersion Index Oxidation Induction Time (O.I.T) 	Adjust/ Rerun/ Record QC-Report (LA-F-006)	
10		Packing End	Scales	Weighting/ Identify Tag & Lable	Standard Packaging Operation	
		Liiq				