

Materials List for:

Film Extrusion of *Crambe abyssinica*/Wheat Gluten Blends

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Materials

Name	Company	Catalog Number	Comments
Crambe meal	Plant Research International		Defatted crambe meal, Residual from oil extraction of cultivar Galactica seeds
Wheat gluten	Lantmännen Reppe AB		It contains 77% (w/w) gluten, 8.1% (w/w) starch and 1.34% (w/w) fat.
Glycerol	Karlshamn Tefac AB	99.5% purity	
Urea	Sigma Aldrich	purity ≥ 99.5%	
The dough			(per 100 g) prepared with 35.7 g crambe meal, 23.8 g wheat gluten, 25.5 g glycerol and 15 g urea, hence with a liquid (glycerol/urea) to solid (crambe/wheat gluten) ratio of 0.342.
Round, fine meshed stainless steel kitchen sieve (pore size: ~1.5 mm, 14 mesh)			Sieve the crambe meal
Rotary ball mill	Pascal Engineering		Milling crambe/The volume of the mill house is 7 L and it contained 215 ceramic balls, each with a diameter of 25 mm.
Mortar and pestle			Grinding urea
Kitchen machine Cloer 660	Cloer		Blending crambe and wheat gluten
Twin-screw extruder Type LTE20-48	Labtech Engineering LTD		Compounding and film extrusion
Flat sheet die			Produce extruded flat films with a cross-section of 45 mm x 0.7 mm
Air Cooling Conveyor Unit type LAC-2.6	Labtech Engineering LTD		Used in the extrusion
Pelletizer Type LZ-120	Labtech Engineering LTD		Making pellets
Polystat 200T Hot Press	Servitec Machine GmbH		Hot press to press extrudates