

AVENA BEST INGREDIENT FORMULATIONS

WHITE BREAD

ALLERGY-FRIENDLY, VEGAN



INTRODUCTION

Avena Best Specialty Milled Flours are ready-to-eat (RTE) functional ingredients for creating clean-label, allergy-friendly, plant-based foods. Using the intrinsic properties of the protein, starch and fiber in pulses, Avena's proprietary specialty milling process produces flours with targeted functionality.

In this gluten-free bread formulation, **Avena Best Pulse Bind Up (PBU) (NB) ©**, **Avena Best Pulse Visco Enhancer (PVE) (CP) ©** and **Avena Best Pea Hull Fiber 125 ©** provide the structure and binding properties that are typically provided by egg whites.



PRODUCTION METHOD

- 1) In a large mixing bowl, combine dry ingredients except for the milled flax. Mix on slow speed using a beater attachment for 2 min.
- 2) In a separate bowl, combine milled flax with twice the weight of water and mix well (for 23 g flax add 46 g water).
- 3) Add wet ingredients and the hydrated flax to the dry ingredients and mix for 1 min on slow speed. Scrape down the sides of the bowl, then continue to mix for 2 min on fast speed.
- 4) Scale and mould dough to desired size and shape.
- 5) Proof dough for 55-60 min at 40°C, 80% RH.
- 6) Bake at 220°C for 30 min (400 g loaf).
- 7) Allow to cool fully (minimum of 3 hr or when internal temperature reaches <30°C) before slicing and packaging.

FORMULATION

INGREDIENTS

Dry Ingredients

INGREDIENTS	MASS(g)	TOTAL (%)
Potato starch	225	14.1
Tapioca starch	225	14.1
Avena Best PBU (NB) ©	10	0.6
Psyllium Husk	30	1.9
Avena Best PVE (CP) ©	17	1.1
Wellence (HPMC)	11	0.7
White rice flour	35	2.2
Softening enzyme	2	0.1
Fermented rice starch	8	0.5
Xanthan gum	6	0.4
Buckwheat flour	75	4.7
Golden milled flax	23	1.4
K4M (HPMC)	15	0.9
Sugar or Inulin	38	2.4
Avena Best Pea Hull Fiber 125 ©	10	0.6
Rice starch	53	3.3
Salt	14	0.9

Wet Ingredients

Water (20-30°C)	630	39.4
Glycerine	27	1.7
Bakers high activity yeast	33	2.1
Canola oil	113	7.1

TOTAL

1600 100

Note: This is a prototype application formula and should be used only as a guide for suggested ingredients and starting levels.