

# #80 Kamille pale

Belgian Pale Ale (16 B)

**Type:** All Grain  
**Batch Size:** 21,00 l  
**Boil Size:** 24,55 l  
**Boil Time:** 65 min  
**End of Boil Vol:** 21,84 l  
**Final Bottling Vol:** 21,00 l  
**Fermentation:** Ale, Single Stage

**Date:** 10 May 2015  
**Brewer:** Thomas Nylander Nørgaard  
**Asst Brewer:**  
**Equipment:** Brouwland gryde  
**Efficiency:** 83,00 %  
**Est Mash Efficiency:** 83,0 %  
**Taste Rating:** 30,0

**Taste Notes:**

## Ingredients

Amt	Name	Type	#	%/IBU
2,00 kg	Pale Malt, Maris Otter (5,9 EBC)	Grain	1	42,6 %
1,00 kg	DMG Pilsner (4,0 EBC)	Grain	2	21,3 %
0,50 kg	Carared (39,4 EBC)	Grain	3	10,6 %
0,50 kg	Oats, Malted (2,0 EBC)	Grain	4	10,6 %
0,50 kg	Wheat, Torrified (3,3 EBC)	Grain	5	10,6 %
0,20 kg	Special B Malt (354,6 EBC)	Grain	6	4,3 %
7,00 g	Target [12,64 %] - Boil 60,0 min	Hop	7	9,9 IBUs
1,00 tsp	Irish Moss (Boil 10,0 mins)	Fining	8	-
25,00 g	Topaz [15,90 %] - Boil 5,0 min	Hop	9	8,8 IBUs
17,00 g	Goldings [5,69 %] - Boil 5,0 min	Hop	10	2,1 IBUs
9,00 g	Kamilleblomster (Boil 5,0 mins)	Spice	11	-
1,0 pkg	SafBrew Ale (DCL/Fermentis #S-33) [23,66 ml]	Yeast	12	-
1,00 tsp	Yeast Nutrient (Primary 3,0 days)	Other	13	-

## Gravity, Alcohol Content and Color

**Est Original Gravity:** 1,056 SG  
**Est Final Gravity:** 1,017 SG  
**Estimated Alcohol by Vol:** 5,2 %  
**Bitterness:** 20,8 IBUs  
**Est Color:** 24,5 EBC

**Measured Original Gravity:** 1,052 SG  
**Measured Final Gravity:** 1,010 SG  
**Actual Alcohol by Vol:** 5,5 %  
**Calories:** 484,7 kcal/l

## Mash Profile

**Mash Name:** Single Infusion, Full Body  
**Sparge Water:** 12,09 l  
**Sparge Temperature:** 75,6 C  
**Adjust Temp for Equipment:** FALSE

**Total Grain Weight:** 4,70 kg  
**Grain Temperature:** 22,2 C  
**Tun Temperature:** 22,2 C  
**Mash PH:** 5,20

## Mash Steps

Name	Description	Step Temperature	Step Time
Mash In	Add 14,26 l of water at 74,7 C	68,9 C	45 min
Mash Out	Add 4,90 l of water at 97,4 C	75,6 C	10 min

**Sparge:** Fly sparge with 12,09 l water at 75,6 C

**Mash Notes:** Simple single infusion mash for use with most modern well modified grains (about 95% of the time).

## Carbonation and Storage

**Carbonation Type:** Keg  
**Pressure/Weight:** 12,54 PSI  
**Keg/Bottling Temperature:** 7,2 C  
**Fermentation:** Ale, Single Stage

**Volumes of CO2:** 2,3  
**Carbonation Used:** Keg with 12,54 PSI  
**Age for:** 30,00 days  
**Storage Temperature:** 18,3 C

## Notes

18L. RO-vand

Created with [BeerSmith](#)