

# #109 Quad

Belgian Dark Strong Ale (18 E)

**Type:** All Grain  
**Batch Size:** 20,00 l  
**Boil Size:** 24,58 l  
**Boil Time:** 90 min  
**End of Boil Vol:** 20,83 l  
**Final Bottling Vol:** 19,00 l  
**Fermentation:** Ale, Single Stage

**Date:** 29 Dec 2016  
**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
4,00 kg	DMG Pilsner (4,0 EBC)	Grain	1	44,9 %
2,00 kg	CHÂTEAU MUNICH (25,0 EBC)	Grain	2	22,5 %
1,00 kg	Ølandshvede (4,0 EBC)	Grain	3	11,2 %
0,50 kg	Special B Malt (354,6 EBC)	Grain	4	5,6 %
0,40 kg	Abbey Malt (45,0 EBC)	Grain	5	4,5 %
0,30 kg	Biscuit Malt (45,3 EBC)	Grain	6	3,4 %
0,70 kg	Kandijsiroop (1900,0 EBC)	Sugar	7	7,9 %
10,00 g	Topaz [15,90 %] - Boil 60,0 min	Hop	8	13,3 IBUs
5,00 g	Topaz [15,90 %] - Boil 20,0 min	Hop	9	4,0 IBUs
1,00 tsp	Irish Moss (Boil 10,0 mins)	Fining	10	-
60,00 g	Brewers Gold [4,53 %] - Boil 10,0 min	Hop	11	8,3 IBUs
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:** 1,104 SG  
**Est Final Gravity:** 1,024 SG  
**Estimated Alcohol by Vol:** 10,7 %  
**Bitterness:** 25,6 IBUs  
**Est Color:** 160,4 EBC

**Measured Original Gravity:** 1,092 SG  
**Measured Final Gravity:** 1,010 SG  
**Actual Alcohol by Vol:** 10,9 %  
**Calories:** 889,6 kcal/l

## Mash Profile

**Mash Name:** Temperature Mash, 1 Step, Full Body  
**Sparge Water:** 11,41 l  
**Sparge Temperature:** 75,6 C  
**Adjust Temp for Equipment:** FALSE  
**Est Mash PH:** 5,41  
**Measured Mash PH:** 5,20

**Total Grain Weight:** 8,90 kg  
**Grain Temperature:** 22,2 C  
**Tun Temperature:** 22,2 C  
**Target Mash PH:** 5,20  
**Mash Acid Addition:**  
**Sparge Acid Addition:**

## Mash Steps

Name	Description	Step Temperature	Step Time
Saccharification	Add 23,39 l of water at 75,1 C	68,9 C	40 min
Mash Out	Heat to 75,6 C over 10 min	75,6 C	10 min

**Sparge:** Fly sparge with 11,41 l water at 75,6 C

**Mash Notes:** Temperature mash for use when mashing in a brew pot over a heat source such as the stove. Use heat to maintain desired temperature during the mash.

### 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

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