

# 136 Dead end Kölsch

Kölsch (4 G)

**Type:** All Grain  
**Batch Size:** 51,00 L  
**Boil Size:** 55,12 L  
**Boil Time:** 60 min  
**End of Boil Vol:** 53,12 L  
**Final Bottling Vol:** 49,50 L  
**Fermentation:** Ale, Two Stage

**Date:** 23 Apr 2023  
**Brewer:** MortenBryg  
**Asst Brewer:**  
**Equipment:** Brewster Beacon 70  
 Mortenbryg forsÅg  
**Efficiency:** 81,00 %  
**Est Mash Efficiency:** 81,0 %  
**Taste Rating:** 30,0



## Taste Notes:

## Ingredients

| Amt        | Name  | Type        | # | %/IBU     | Volume |
|------------|---|-------------|---|-----------|--------|
| 10,00 ml   | Lactic Acid (Mash)                                    | Water Agent | 1 | -         | -      |
| 8,50 kg    | Chateau Pilsner 2 Row (3,2 EBC)                       | Grain       | 2 | 85,0 %    | 5,54 L |
| 1,00 kg    | CHÂTEAU WHEAT BLANC (4,5 EBC)                         | Grain       | 3 | 10,0 %    | 0,65 L |
| 0,50 kg    | Vienna Malt (6,9 EBC)                                 | Grain       | 4 | 5,0 %     | 0,33 L |
| 20,00 g    | Hallertau Magnum [12,80 %] - Boil 60,0 min            | Hop         | 5 | 13,1 IBUs | -      |
| 70,00 g    | Hallertauer Mittelfrueh [3,40 %] - Boil 25,0 min      | Hop         | 6 | 8,5 IBUs  | -      |
| 1,00 Items | Protafloc (Boil 10,0 mins)                            | Fining      | 7 | -         | -      |
| 30,00 g    | Hallertauer Mittelfrueh [3,70 %] - Boil 5,0 min       | Hop         | 8 | 1,1 IBUs  | -      |
| 2,0 pkg    | Kölm Kölsch Style Ale Yeast (Lallemand #-) [50,28 ml] | Yeast       | 9 | -         | -      |

## Gravity, Alcohol Content and Color

**Est Original Gravity:** 1,050 SG  
**Est Final Gravity:** 1,012 SG  
**Estimated Alcohol by Vol:** 5,0 %  
**Bitterness:** 22,8 IBUs  
**Est Color:** 6,1 EBC

**Measured Original Gravity:** 1,057 SG  
**Measured Final Gravity:** 1,007 SG  
**Actual Alcohol by Vol:** 6,6 %  
**Calories:** 529,3 kcal/l

## Mash Profile

**Mash Name:** Single Infusion, Medium Body  
**Sparge Water:** 18,14 L  
**Sparge Temperature:** 75,6 C  
**Adjust Temp for Equipment:** FALSE  
**Est Mash PH:** 5,72  
**Measured Mash PH:** 0,00

**Total Grain Weight:** 10,00 kg  
**Grain Temperature:** 22,2 C  
**Tun Temperature:** 22,2 C  
**Target Mash PH:** 5,20  
**Mash Acid Addition:** None  
**Sparge Acid Addition:** None

## Mash Steps

| Name     | Description                    | Step Temperature | Step Time |
|----------|--------------------------------|------------------|-----------|
| Mash In  | Add 48,00 L of water at 70,5 C | 67,0 C           | 60 min    |
| Mash Out | Add 0,00 L of water at 78,0 C  | 78,0 C           | 20 min    |

**Sparge:** Fly sparge with 18,14 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:** Bottle  
**Pressure/Weight:** 264,93 g  
**Keg/Bottling Temperature:** 21,1 C  
**Fermentation:** Ale, Two Stage  
**Fermenter:**

**Volumes of CO<sub>2</sub>:** 2,3  
**Carbonation Est:** Bottle with 264,93 g  
 Table Sugar  
**Carbonation (from Meas Vol):** Bottle  
 with 251,55 g Table Sugar  
**Age for:** 30,00 days

**Storage Temperature:** 18,3 C

## Notes

50% RO vand

der var indkøbt. + 1,5kg pilsner efter det indkøb. Humleprofil ændret en del.

45L OG 1057 i brewmonk ved 24 grader sat i flamingokasse sat til 15 grader.

24/4 kl 17 gær tilsat ved 15 grader + 4,7L vand for at sænke alkohol.

Efter en uge ud af gærskab. I garage ved ca. 15 grader.

Flasket 21/5:

1 x 19L mad med 108g sukker = 5,7g/L

2 x 9L fad med 54g sukker = 6g/l

16 x 0,5l flasker med 48g sukker = 6g/l

4 x 0,5L flaske med 3g sukker i hver = 6g/l

47 liter i alt.

*Created with BeerSmith*