

Kolonia?

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **32**
- SRM **2.8**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

Steps

- Temp **52 C**, Time **20 min**
- Temp **68 C**, Time **90 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **90 min** at **68C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	5 kg (89.3%)	80.5 %	2
Grain	Barley, Flaked	0.4 kg (7.1%)	70 %	4
Grain	Wheat, Flaked	0.2 kg (3.6%)	77 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	opal DE 2016	50 g	40 min	7.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
s04	Ale	Slant	100 ml	---