Kölsch

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **18**
- SRM **3.6**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.3 liter(s)**
- Total mash volume **17.1 liter(s)**

Steps

- Temp **55 C**, Time **5 min**
- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **13.3 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **60 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg *(78.9%)*	81 %	4
Grain	Pszeniczny	0.5 kg *(13.2%)*	85 %	4
Grain	Bestmalz Carmel Pils	0.2 kg *(5.3%)*	75 %	5
Grain	Carahell Best	0.1 kg *(2.6%)*	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Centennial	10 g	60 min	9.5 %
Boil	Tettnang	10 g	15 min	5 %
Boil	Centennial	10 g	5 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 1728 Scottish Ale	Ale	Liquid	200 ml	Wyeast Labs