

Koelsch

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **26**
- SRM **3.9**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **28.5 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **21.1 liter(s)**
- Total mash volume **27.5 liter(s)**

Steps

- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **21.1 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **28.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (78.1%)	81 %	4
Grain	Pszeniczny	1 kg (15.6%)	85 %	4
Grain	Jęczmień niesłodowany	0.4 kg (6.3%)	75 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	30 g	70 min	4.2 %
Boil	Tettnang	30 g	60 min	3.7 %
Boil	Tettnang	20 g	10 min	3.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale s-33	Ale	Dry	11.5 g	---

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	10 min