

Koelsch

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **19**
- SRM **3.7**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **1 %**
- Size with trub loss **24.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **1 %/h**
- Boil size **25 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **16.7 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **16.7 liter(s)** of strike water to **68.8C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **25 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.5 kg (77.8%)	81 %	4
Grain	Pszeniczny	0.6 kg (13.3%)	85 %	4
Grain	Monachijski	0.4 kg (8.9%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	25 g	60 min	5.5 %
Boil	Tradition	25 g	10 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Wheat	Dry	11.5 g	Safale