

Koelsch 1

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **26**
- SRM **3**
- Style **Kölsch**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **9 %/h**
- Boil size **25.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.7 liter(s)**
- Total mash volume **15.6 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **11.7 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.45 kg (85.6%)	81 %	4
Grain	Pszeniczny	0.45 kg (11.2%)	85 %	4
Sugar	Glukoza piwowarska	0.13 kg (3.2%)	81 %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	60 min	3.8 %
Aroma (end of boil)	Tradition	20 g	30 min	6 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	10 min	4 %
Whirlpool	Tradition	10 g	0 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar