

## 5B. Kölsch

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **26**
- SRM **3.7**
- Style **Kölsch**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **3 %**
- Size with trub loss **15.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **7 %/h**
- Boil size **17.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4.7 liter(s) / kg**
- Mash size **15.1 liter(s)**
- Total mash volume **18.4 liter(s)**

### Steps

- Temp **53 C**, Time **10 min**
- Temp **63 C**, Time **45 min**
- Temp **73 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **15.1 liter(s)** of strike water to **56.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **73C**
- Keep mash **5 min** at **76C**
- Sparge using **6 liter(s)** of **76C** water or to achieve **17.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.9 kg (90%)	81 %	4
Grain	Strzegom Wiedeński	0.323 kg (10%)	79 %	10

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	20 g	60 min	6.2 %
Aroma (end of boil)	Hallertau Spalt Select	25 g	15 min	3.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Lutra OYL-071	Ale	Dry	7.89 g	Omega

### Extras

Type	Name	Amount	Use for	Time
Water Agent	CaSO4	2 g	Mash	60 min
Water Agent	CaCl2	2 g	Mash	60 min

## Notes

- 20 C 5 - 7 dni  
18 C 1 dzień  
2 C 14 dni  
*Sep 3, 2021, 11:20 AM*