

## Kolsch #1

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **34**
- SRM **2.8**
- Style **Kölsch**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **15.7 liter(s)**
- Total mash volume **20.4 liter(s)**

### Steps

- Temp **57 C**, Time **10 min**
- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **15.7 liter(s)** of strike water to **62.6C**
- Add grains
- Keep mash **10 min** at **57C**
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsen Malt	3.75 kg (78.9%)	80.5 %	2
Grain	Pszeniczny	1 kg (21.1%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	53 min	13.5 %
Boil	Hallertau	20 g	14 min	4.5 %
Boil	Spalt	20 g	10 min	5.5 %
Boil	Hallertau	20 g	5 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM42 Stare Nadreńskie	Ale	Liquid	1200 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	4 g	Mash	60 min

## Notes

- F1 01/12 11,5'BLG  
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