

## Kolsch 2

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- Gravity **11.9 BLG**
- ABV ---
- IBU **26**
- SRM **4**
- Style **Kölsch**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **27 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.3 liter(s)**

### Steps

- Temp **43 C**, Time **10 min**
- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **46.3C**
- Add grains
- Keep mash **10 min** at **43C**
- Keep mash **40 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **27 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.7 kg (86%)	80 %	4
Grain	Strzegom pszeniczny	0.6 kg (14%)	81 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	5 g	60 min	15.5 %
Boil	Amarillo	10 g	60 min	9.5 %
Boil	Lublin (Lubelski)	10 g	15 min	4 %
Boil	Tnt	5 g	15 min	12.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	---