

# Kolsch

- Gravity **12.9 BLG**
- ABV ---
- IBU **28**
- SRM **4.4**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **15.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **18.4 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.85 kg (72.6%)	81 %	4
Grain	Pszeniczny	0.25 kg (4.7%)	85 %	4
Grain	Carahell	0.2 kg (3.8%)	77 %	26
Grain	Castle Pale Ale	1 kg (18.9%)	80 %	8

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	60 g	60 min	4.5 %
Dry Hop	Hallertau Spalt Select	50 g	7 day(s)	3.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis K-97	Lager	Dry	12 g	---