

# Koelsch

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **29**
- SRM **7**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **2 %**
- Size with trub loss **51 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **55.6 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **37 liter(s)**
- Total mash volume **49.4 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **37 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **30.9 liter(s)** of **76C** water or to achieve **55.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Mep©Lager	10 kg (81%)	80 %	3
Grain	Słód pszeniczny	2 kg (16.2%)	82 %	5
Grain	Strzegom Karmel 300	0.34 kg (2.8%)	70 %	299

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	75 g	60 min	7 %
Aroma (end of boil)	Perle	45 g	10 min	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-33	Ale	Dry	23 g	Fermentis