

# Kölsch

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **16**
- SRM **4.3**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.3 kg (64.1%)	81 %	4
Grain	Monachijski	0.5 kg (9.7%)	80 %	18
Grain	Pszeniczny	1 kg (19.4%)	85 %	4
Grain	Płatki owsiane	0.35 kg (6.8%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	25 g	60 min	4.4 %
Boil	Tradition	25 g	10 min	4.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	---