

# Koelsch

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **34**
- SRM **3.5**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

## Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **15.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **20.2 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Bohemian Pilsner Malt	4.7 kg (92.2%)	80 %	4
Grain	Weyermann pszeniczny jasny	0.4 kg (7.8%)	80 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Wolf	15 g	60 min	13.2 %
Boil	Hallertau Tradition	20 g	30 min	5 %
Boil	Hallertau Tradition	20 g	15 min	5 %
Boil	Hallertau Tradition	20 g	5 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	11.5 g	Fermentis

Uwodnić i dodać wraz z pożywką dla drożdzy

## Extras

Type	Name	Amount	Use for	Time
Fining	Wirflock	0.5 g	Boil	15 min