

# Koelsch

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **23**
- SRM **3.6**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.4 liter(s)**
- Total mash volume **13.8 liter(s)**

## Steps

- Temp **52 C**, Time **30 min**
- Temp **65 C**, Time **75 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **10.4 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **30 min** at **52C**
- Keep mash **75 min** at **65C**
- Keep mash **10 min** at **76C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (87%)	81 %	4
Grain	Pszeniczny	0.19 kg (5.4%)	85 %	4
Grain	Strzegom Wiedeński	0.19 kg (5.4%)	79 %	10
Grain	Weyermann - Carapils	0.08 kg (2.2%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Spalt	15 g	60 min	5.5 %
Boil	Hallertau Mittelfruh	11.25 g	45 min	3 %
Boil	Spalt	15 g	15 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	16.5 g	Danstar