

# koelsch

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **25**
- SRM **3.6**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **45 C**, Time **0 min**
- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **49.2C**
- Add grains
- Keep mash **0 min** at **45C**
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	słód pilzneński	4 kg (76.2%)	80 %	3
Grain	Słód pszeniczny strzegom	1 kg (19%)	82 %	5
Grain	słód caramel	0.25 kg (4.8%)	77 %	8

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	25 g	60 min	5.2 %
Boil	Tradition	25 g	30 min	5.2 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
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Fining	mech irlandzki	5 g	Boil	10 min
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