

# a'la Koelsch

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **21**
- SRM **4.6**
- 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 **14.8 liter(s)**
- Total mash volume **19.7 liter(s)**

## Steps

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

## Mash step by step

- Heat up **14.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.1 kg (83.3%)	81 %	4
Grain	Monachijski	0.32 kg (6.5%)	80 %	16
Grain	Pszeniczny	0.3 kg (6.1%)	85 %	4
Grain	Caramunich® typ I	0.1 kg (2%)	73 %	80
Grain	Weyermann - Carapils	0.1 kg (2%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	13.5 %
Boil	Lublin (Lubelski)	15 g	10 min	4 %
Aroma (end of boil)	Nelson Sauvín	15 g	5 min	11 %
Whirlpool	Nelson Sauvín	15 g	0 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Lallemand LalBrew Köln	Ale	Dry	12 g	---
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