

# Kölsch

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **30**
- SRM **4.5**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **35 liter(s)**
- Trub loss **5 %**
- Size with trub loss **36.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **45 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.9 liter(s) / kg**
- Mash size **34.8 liter(s)**
- Total mash volume **43.8 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **34.8 liter(s)** of strike water to **56.1C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **45 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	7.4 kg (82.9%)	82 %	4
Grain	Pszeniczny	1 kg (11.2%)	85 %	4
Grain	Briess - 2 Row Carapils Malt	0.32 kg (3.6%)	75 %	3
Grain	Caramunich® typ I	0.21 kg (2.4%)	73 %	80

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	50 g	60 min	5.5 %
Boil	Tradition	30 g	30 min	5.5 %
Boil	Tradition	0 g	15 min	5.5 %
Boil	Hallertau Spalt Select	50 g	15 min	3.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM50 Kłosy Kansas	Wheat	Slant	1500 ml	Fermentum Mobile

FM30 Bohemska rapsodia	Lager	Liquid	70 ml	Fermentum Mobile
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### Extras

Type	Name	Amount	Use for	Time
Fining	wirflock	10.3 g	Boil	15 min

### Notes

- warka do podziału na  
21 litry kolsh - kłosy Kansas  
12 litrów pilss bohemska rapsodia  
*Oct 18, 2020, 1:37 PM*