

# Kolsh

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **26**
- SRM **3.7**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.8 liter(s)**

## Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **21.6 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **55 C**, Time **15 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **21.6 liter(s)** of strike water to **58.9C**
- Add grains
- Keep mash **15 min** at **55C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **7 liter(s)** of **76C** water or to achieve **23.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (83.3%)	81 %	4
Grain	Pszeniczny	0.5 kg (10.4%)	85 %	4
Grain	Weyermann - Carapils	0.3 kg (6.3%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11 %
Aroma (end of boil)	Lublin (Lubelski) PH	50 g	5 min	5.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Slant	200 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Fining	Whirfloc	4 g	Boil	5 min