

# kolsh z pk

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **29**
- SRM **4.6**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **70 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	3.85 kg (63.1%)	81 %	5
Grain	Weyermann pszeniczny jasny	0.25 kg (4.1%)	80 %	6
Grain	Weyermann - Pale Ale Malt	2 kg (32.8%)	85 %	7

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	50 g	60 min	4.5 %
Boil	Hallertau	10 g	10 min	4.5 %
Boil	English Golding	25 g	30 min	4.8 %
Dry Hop	English Golding	25 g	0 day(s)	4.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
safale k75	Lager	Dry	23 g	rehydratyzacja 300ml wody