

# kolsh z pk

- Gravity **10 BLG**
- ABV **4 %**
- IBU **28**
- SRM **3.5**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **17 %/h**
- Boil size **28 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 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 **12.3 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 **19.8 liter(s)** of **76C** water or to achieve **28 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	3.85 kg (93.9%)	81 %	5
Grain	Weyermann pszeniczny jasny	0.25 kg (6.1%)	80 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	50 g	60 min	4.5 %
Boil	Hallertau	10 g	10 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
safale k75	Lager	Dry	11.5 g	---