

# Brzozowy kolsch

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **42**
- SRM **6.5**
- Style **Kölsch**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **3 %**
- Size with trub loss **25.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **28.6 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **15.1 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **10.8 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **22.1 liter(s)** of **76C** water or to achieve **28.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (69.8%)	82 %	4
Grain	Pszeniczny	0.5 kg (11.6%)	85 %	4
Grain	Strzegom Monachijski typ I	0.5 kg (11.6%)	79 %	16
Grain	Strzegom Karmel 150	0.3 kg (7%)	75 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	11.5 %
Aroma (end of boil)	Hersbrucker	40 g	15 min	3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Lalbrew kolsch	Ale	Dry	22 g	Bezpośrednio