

# Pilśniowy lager kłaka

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **23**
- SRM **3.8**
- Style **Vienna Lager**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **10 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **34.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.6 liter(s) / kg**
- Mash size **24.1 liter(s)**
- Total mash volume **30.8 liter(s)**

## Steps

- Temp **50 C**, Time **30 min**
- Temp **65 C**, Time **30 min**
- Temp **70 C**, Time **30 min**

## Mash step by step

- Heat up **24.1 liter(s)** of strike water to **54.2C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **70C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **34.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6.5 kg (97%)	81 %	4
Grain	Cara-Pils/Dextrine	0.2 kg (3%)	72 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	50 g	60 min	4.5 %
Boil	Saaz (Czech Republic)	15 g	15 min	4.5 %
Aroma (end of boil)	Saaz (Czech Republic)	25 g	5 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	11.5 g	Fermentis