

# pils

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **36**
- SRM **4.1**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **6 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **33.3 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **20.5 liter(s)** of **76C** water or to achieve **33.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (78.1%)	80 %	4
Grain	Strzegom Wiedeński	1 kg (15.6%)	79 %	10
Grain	caramel/pils	0.4 kg (6.3%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka (goryczkowy)	30 g	60 min	10 %
Boil	Sybilla	20 g	30 min	6 %
Boil	Sybilla	20 g	15 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M84 Bohemian Lager	Lager	Dry	10 g	Mangrove Jack's