

# pils

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **39**
- SRM **3.7**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **20.8 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (96.2%)	81 %	4
Grain	carabody	0.2 kg (3.8%)	75 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	EXP-2 (PH)	30 g	60 min	8 %
Dry Hop	EXP-2 (PH)	110 g	5 day(s)	8 %
Boil	EXP-2 (PH)	60 g	5 min	8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Liquid	1800 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Fining	wirflock	1 g	Boil	5 min
Water Agent	NaCl	4 g	Boil	60 min