

# pils

- Gravity **9.5 BLG**
- ABV **3.7 %**
- IBU **55**
- SRM **3.4**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **20 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **20 min** at **76C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	4 kg (100%)	81 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	70 min	13.5 %
Boil	Hallertau	30 g	40 min	4.5 %
Boil	Hallertau	30 g	30 min	4.5 %
Boil	Saaz (Czech Republic)	30 g	10 min	4.5 %
Boil	Saaz (Czech Republic)	30 g	0 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
fermentis saflager	Lager	Dry	11.5 g	---

## Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	7 g	Boil	15 min