

# pils

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- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **46**
- SRM **2.9**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **8 %/h**
- Boil size **28.8 liter(s)**

## Mash information

- Mash efficiency **96 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **51 C**, Time **15 min**
- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **55.4C**
- Add grains
- Keep mash **15 min** at **51C**
- Keep mash **60 min** at **67C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilsner (2 Row) Ger	4 kg (100%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	10 %
Boil	Brewers Gold	30 g	30 min	5.2 %
Boil	Brewers Gold	20 g	10 min	5.2 %