

Pils

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **40**
- SRM **3.9**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **0 %**
- Size with trub loss **12 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **15.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **15.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (100%)	82 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	13 g	60 min	11.5 %
Boil	Hallertau Mittelfruh	20 g	15 min	3 %
Whirlpool	Hallertau Mittelfruh	20 g	30 min	3 %