

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 | lunga | 13 g | 60 min | 11.5 % |
| Boil | Hallertau Mittelfruh | 20 g | 15 min | 3 % |
| Whirlpool | Hallertau Mittelfruh | 20 g | 30 min | 3 % |