

## Pils #3

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **34**
- SRM **4.3**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **550 liter(s)**
- Trub loss **5 %**
- Size with trub loss **583 liter(s)**
- Boil time **60 min**
- Evaporation rate **2 %/h**
- Boil size **622.7 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **428.8 liter(s)**
- Total mash volume **551.3 liter(s)**

### Steps

- Temp **45 C**, Time **10 min**
- Temp **63 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **428.8 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **60 min** at **63C**
- Keep mash **1 min** at **78C**
- Sparge using **316.4 liter(s)** of **76C** water or to achieve **622.7 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Viking Pilsner malt  | 80 kg (65.3%)   | 82 %  | 4   |
| Grain | Rye Malt             | 37.5 kg (30.6%) | 63 %  | 10  |
| Grain | Weyermann - Carapils | 5 kg (4.1%)     | 78 %  | 4   |

### Hops

| Use for   | Name                  | Amount | Time   | Alpha acid |
|-----------|-----------------------|--------|--------|------------|
| Boil      | Oktawia               | 300 g  | 60 min | 9 %        |
| Boil      | Saaz (Czech Republic) | 400 g  | 60 min | 4.5 %      |
| Boil      | Saaz (Czech Republic) | 600 g  | 30 min | 4.5 %      |
| Whirlpool | Oktawia               | 700 g  | 15 min | 9 %        |