

# pils

- Gravity **11.4 BLG**
- ABV ---
- IBU **38**
- SRM **3.1**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **10 %**
- Size with trub loss **33 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **40.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.6 liter(s) / kg**
- Mash size **22.3 liter(s)**
- Total mash volume **28.5 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **22.3 liter(s)** of strike water to **70.1C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **24.3 liter(s)** of **76C** water or to achieve **40.4 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount        | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Pilsner (2 Row) Bel    | 6 kg (96.8%)  | 79 %  | 3   |
| Grain | Briess - Carapils Malt | 0.2 kg (3.2%) | 74 %  | 5   |

## Hops

| Use for             | Name                  | Amount | Time   | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil                | Saaz (Czech Republic) | 47 g   | 80 min | 4 %        |
| Boil                | Saaz (Czech Republic) | 70 g   | 30 min | 4 %        |
| Aroma (end of boil) | Saaz (Czech Republic) | 80 g   | 5 min  | 4 %        |

## Yeasts

| Name                 | Type  | Form   | Amount | Laboratory       |
|----------------------|-------|--------|--------|------------------|
| FM31 Bawarska Dolina | Lager | Liquid | 112 ml | Fermentum Mobile |