

## pils

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **40**
- SRM **5.9**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **27.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **7 %/h**
- Boil size **33.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

### Steps

- Temp **55 C**, Time **10 min**
- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **20 min**

### Mash step by step

- Heat up **18.9 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **20 min** at **76C**
- Sparge using **21 liter(s)** of **76C** water or to achieve **33.6 liter(s)** of wort

### Fermentables

| Type  | Name                             | Amount        | Yield | EBC |
|-------|----------------------------------|---------------|-------|-----|
| Grain | Weyermann - Pilsner Malt         | 5 kg (79.4%)  | 81 %  | 5   |
| Grain | Briess - Munich Malt 10L         | 1 kg (15.9%)  | 77 %  | 20  |
| Grain | Słód Caramunich Typ II Weyermann | 0.2 kg (3.2%) | 73 %  | 90  |
| Grain | zakwaszajacy                     | 0.1 kg (1.6%) | 55 %  | 5   |

### Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Magnum                | 15 g   | 70 min | 13.5 %     |
| Boil    | Hallertau             | 30 g   | 40 min | 4.5 %      |
| Boil    | Hallertau             | 30 g   | 30 min | 4.5 %      |
| Boil    | Saaz (Czech Republic) | 30 g   | 10 min | 4.5 %      |
| Boil    | Saaz (Czech Republic) | 30 g   | 0 min  | 4.5 %      |

### Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

| Name               | Type  | Form | Amount | Laboratory |
|--------------------|-------|------|--------|------------|
| fermentis saflager | Lager | Dry  | 11.5 g | ---        |

### Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 7 g    | Boil    | 15 min |