

## #31 Pils

- Gravity **13.1 BLG**
- ABV ---
- IBU **23**
- SRM **5.3**
- Style **Bohemian Pilsener**

### Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **6 %**
- Size with trub loss **42.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **6 %/h**
- Boil size **50.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30.9 liter(s)**
- Total mash volume **41.3 liter(s)**

### Steps

- Temp **50 C**, Time **30 min**
- Temp **65 C**, Time **30 min**
- Temp **70 C**, Time **30 min**

### Mash step by step

- Heat up **30.9 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **70C**
- Sparge using **29.5 liter(s)** of **76C** water or to achieve **50.1 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount          | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Pilzneński soufflet  | 9.5 kg (92.1%)  | 81 %  | 4   |
| Grain | Weyermann - Carapils | 0.13 kg (1.3%)  | 78 %  | 4   |
| Grain | Carahell             | 0.41 kg (4%)    | 77 %  | 26  |
| Grain | Fawcett - Crystal    | 0.175 kg (1.7%) | 70 %  | 160 |
| Grain | Żytni                | 0.1 kg (1%)     | 85 %  | 8   |

### Hops

| Use for | Name                  | Amount | Time   | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil    | Saaz                  | 50 g   | 75 min | 3.4 %      |
| Boil    | Saaz (Czech Republic) | 20 g   | 30 min | 3.4 %      |
| Boil    | Saaz (Czech Republic) | 30 g   | 25 min | 3.4 %      |
| Boil    | Marynka               | 35 g   | 15 min | 7.2 %      |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|                        |       |        |       |    |
|------------------------|-------|--------|-------|----|
| FM30 Bohemska rapsodia | Lager | Liquid | 40 ml | FM |
|------------------------|-------|--------|-------|----|