

.PILS

- Gravity **12.6 BLG**
- ABV ---
- IBU **43**
- SRM **4**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **29.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **52 C**, Time **15 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **15 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **60 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **19.3 liter(s)** of **76C** water or to achieve **29.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 4.5 kg (88.2%) | 80 % | 4 |
| Grain | Weyermann - Carapils | 0.5 kg (9.8%) | 78 % | 4 |
| Grain | zakwaszajacy | 0.1 kg (2%) | 1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Marynka | 30 g | 60 min | 10 % |
| Boil | Saaz (Czech Republic) | 20 g | 30 min | 4.5 % |
| Boil | Saaz (Czech Republic) | 20 g | 15 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------|-------|--------|--------|------------------|
| FM30 Bohemska rapsodia | Lager | Liquid | 150 ml | Fermentum Mobile |