

warka 17 duza

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **17**
- SRM **3.8**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **63 C**, Time **35 min**
- Temp **72 C**, Time **40 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **35 min** at **63C**
- Keep mash **40 min** at **72C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------------------|----------------|--------|-----|
| Grain | hook head pilsner | 4 kg (76.9%) | 80.5 % | 3.5 |
| Grain | carmel malt Briess - Carapils Malt | 0.15 kg (2.9%) | 74 % | 3 |
| Grain | BESTMALZ - Best Minich | 0.6 kg (11.5%) | 80.5 % | 15 |
| Grain | irish wheat | 0.25 kg (4.8%) | 75 % | 4 |
| Grain | Oats, Flaked | 0.2 kg (3.8%) | 80 % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Saaz (USA) | 40 g | 40 min | 3.75 % |
| Boil | Magnum | 10 g | 10 min | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 100 ml | Fermentis |