

Angielski porter

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **24**
- SRM **27.6**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **6 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **13.5 %/h**
- Boil size **33.6 liter(s)**

Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **77C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **33.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------------|----------------|-------|------|
| Grain | Weyermann - Pale Ale Malt | 3.6 kg (55.4%) | 85 % | 7 |
| Grain | Pilzneński 3,2-4,5 EBC Viking Malt | 1 kg (15.4%) | 80 % | 4 |
| Grain | Caraaroma | 0.3 kg (4.6%) | 78 % | 400 |
| Grain | Weyermann - Carafa I | 0.1 kg (1.5%) | 70 % | 690 |
| Grain | Płatki owsiane błyskawiczne | 1.2 kg (18.5%) | 70 % | 4 |
| Grain | Carafa Special (R) typ III Weyermann | 0.3 kg (4.6%) | 65 % | 1400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Willamette | 30 g | 20 min | 4.5 % |
| Boil | Pionner | 10 g | 55 min | 8.8 % |
| Boil | Lublin (Lubelski) | 30 g | 55 min | 3.9 % |
| Boil | Pionner | 20 g | 5 min | 8.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|-------------|-------------|---------------|-------------------|
| Safale S-04 | Ale | Dry | 11.5 g | --- |