

Porter angielski

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **22**
- SRM **24.8**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

Steps

- Temp **67 C**, Time **70 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|-----|
| Grain | Castle Pale Ale | 3 kg (85.7%) | 80 % | 8 |
| Grain | Caramel/Crystal Malt - 30L | 0.15 kg (4.3%) | 75 % | 59 |
| Grain | Brown Malt (British Chocolate) | 0.15 kg (4.3%) | 70 % | 200 |
| Grain | Jęczmień palony | 0.2 kg (5.7%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Fuggles | 15 g | 60 min | 4.5 % |
| Boil | Fuggles | 15 g | 30 min | 4.5 % |
| Boil | Fuggles | 10 g | 5 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 6 g | Fermentis |