

Porter angielski

- Gravity **10 BLG**
- ABV ---
- IBU **31**
- SRM **26.4**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **15.2 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **30 min** at **72C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Weyermann - Pale Ale Malt | 3.2 kg (73.6%) | 85 % | 7 |
| Grain | Strzegom Czekoladowy ciemny | 0.25 kg (5.7%) | 68 % | 1200 |
| Grain | Carafa II | 0.1 kg (2.3%) | 70 % | 812 |
| Grain | Simpsons - Crystal Rye | 0.3 kg (6.9%) | 73 % | 177 |
| Grain | Biscuit Malt | 0.5 kg (11.5%) | 79 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | flyer | 10 g | 60 min | 9.8 % |
| Boil | flyer | 20 g | 20 min | 9.8 % |
| Boil | flyer | 20 g | 5 min | 9.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------|------|--------|--------|------------|
| WLP002 - English Ale Yeast | Ale | Liquid | 100 ml | White Labs |