

PORTER ANGIELSKI

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **34**
- SRM **22.6**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **13.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **17.8 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

Steps

- Temp **68 C**, Time **80 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **9.6 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **80 min** at **68C**
- Keep mash **1 min** at **76C**
- Sparge using **11.4 liter(s)** of **76C** water or to achieve **17.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|-----------------|-------|-----|
| Grain | Simpsons - Maris Otter | 2.15 kg (67.2%) | 81 % | 6 |
| Grain | Brown Malt (British Chocolate) | 0.35 kg (10.9%) | 70 % | 128 |
| Grain | Płatki owsiane | 0.25 kg (7.8%) | 60 % | 3 |
| Grain | Fawcett - Crystal | 0.25 kg (7.8%) | 70 % | 160 |
| Grain | Weyermann - Chocolate Wheat | 0.2 kg (6.3%) | 74 % | 788 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | East Kent Goldings | 30 g | 60 min | 6.8 % |