

English Porter

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **25**
- SRM **23.8**
- 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 **8.1 liter(s)**
- Total mash volume **10.8 liter(s)**

Steps

- Temp **70 C**, Time **60 min**

Mash step by step

- Heat up **8.1 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **60 min** at **70C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|------|
| Grain | Briess - Pale Ale Malt | 2 kg (74.1%) | 80 % | 7 |
| Grain | Simpsons - Crystal Rye | 0.25 kg (9.3%) | 73 % | 177 |
| Grain | Brown Malt (British Chocolate) | 0.3 kg (11.1%) | 70 % | 128 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.15 kg (5.6%) | 73 % | 1001 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Lublin (Lubelski) | 25 g | 60 min | 3.5 % |
| Boil | Lublin (Lubelski) | 25 g | 15 min | 3.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------|------|-------|--------|------------------|
| FM11 Wichrowe Wzgórza | Ale | Slant | 50 ml | Fermentum Mobile |