

porter angielski

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **26**
- SRM **22.2**
- 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 **15 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **22.1 liter(s)**

Steps

- Temp **69 C**, Time **60 min**

Mash step by step

- Heat up **17.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|------|
| Grain | fawcett - pale ale maris otter | 3.9 kg (79.6%) | 80 % | 5 |
| Grain | Simpsons - Caramalt | 0.4 kg (8.2%) | 76 % | 35 |
| Grain | Strzegom Karmel 300 | 0.4 kg (8.2%) | 70 % | 299 |
| Grain | Pszeniczny Czekoladowy | 0.2 kg (4.1%) | 73 % | 1001 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil | lunga | 20 g | 60 min | 10 % |
| Aroma (end of boil) | East Kent Goldings | 20 g | 8 min | 5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|------------|------------|
| FM12 W szkocką kratę | Ale | Liquid | 1333.33 ml | --- |