

Porter angielski

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **24.3**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **86 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **20 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Pale Malt (2 Row) UK | 3.3 kg (63.5%) | 78 % | 6 |
| Grain | Chocolate Malt (UK) | 0.5 kg (9.6%) | 73 % | 887 |
| Grain | Biscuit Malt | 0.5 kg (9.6%) | 79 % | 45 |
| Grain | Żytni | 0.5 kg (9.6%) | 85 % | 8 |
| Grain | Strzegom Bursztynowy | 0.4 kg (7.7%) | 70 % | 49 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------|--------|--------|------------|
| Boil | Sabro | 10 g | 60 min | 15 % |
| Aroma (end of boil) | Sabro | 20 g | 10 min | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 200 ml | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Flavor | śliwka wędzona | 600 g | Boil | 10 min |