

Porter angielski 13 BLG

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **29**
- SRM **22.6**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4.3 liter(s) / kg**
- Mash size **26.8 liter(s)**
- Total mash volume **33.1 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **26.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|-----------------|-------|------|
| Grain | Viking Pale Ale malt | 5.48 kg (87.8%) | 80 % | 5 |
| Grain | Strzegom Karmel 300 | 0.4 kg (6.4%) | 70 % | 299 |
| Grain | Strzegom Czekoladowy ciemny | 0.1 kg (1.6%) | 68 % | 1200 |
| Grain | słód prażony | 0.16 kg (2.6%) | 70 % | 1200 |
| Grain | Strzegom Karmel 150 | 0.1 kg (1.6%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Challenger | 30 g | 60 min | 5.1 % |
| Boil | Chinook | 10 g | 60 min | 12.1 % |
| Boil | Fuggles | 15 g | 20 min | 3.65 % |
| Boil | Fuggles | 15 g | 10 min | 3.65 % |