

#070 English Porter

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **26**
- SRM **23.1**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **11 %/h**
- Boil size **25.2 liter(s)**

Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **23.8 liter(s)**

Steps

- Temp **64 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **70 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Maris Otter Crisp | 2.2 kg (46.3%) | 83 % | 6.5 |
| Grain | Viking Pilsner malt | 0.6 kg (12.6%) | 82 % | 4 |
| Grain | Crisp Brown | 1 kg (21.1%) | 72 % | 135 |
| Grain | Strzegom Karmel 300 | 0.3 kg (6.3%) | 70 % | 299 |
| Grain | Słód pszeniczny Bestmalz | 0.3 kg (6.3%) | 82 % | 5 |
| Grain | Fawcett - Dark Crystal | 0.25 kg (5.3%) | 71 % | 220 |
| Grain | Viking Czekoladowy ciemny | 0.1 kg (2.1%) | 67 % | 900 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | East Kent Goldings | 25 g | 60 min | 6.8 % |
| Boil | East Kent Goldings | 15 g | 15 min | 6.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------------------|--------|---------|--------|
| Fining | whirfloc T | 1.25 g | Boil | 10 min |
| Other | pożywka dla drożdży | 10 g | Boil | 10 min |