

# 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