

## 163 English Brown Porter

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **24**
- SRM **23.9**
- Style **Brown Porter**

### Batch size

- Expected quantity of finished beer **23.5 liter(s)**
- Trub loss **7 %**
- Size with trub loss **25.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **5 %/h**
- Boil size **29 liter(s)**

### Mash information

- Mash efficiency **86 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **17.2 liter(s)**
- Total mash volume **22.5 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.5 kg (66%)	85 %	7
Grain	Pszeniczny	0.3 kg (5.7%)	85 %	4
Grain	Fawcett - Brown	0.6 kg (11.3%)	72 %	180
Grain	Fawcett - Pale Chocolate	0.2 kg (3.8%)	71 %	600
Grain	Caramunich® Typ II	0.2 kg (3.8%)	73 %	120
Grain	Carafa® Special Weyermann	0.2 kg (3.8%)	70 %	1034
Grain	Płatki owsiane	0.3 kg (5.7%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	10 g	50 min	14.2 %
Boil	Sybilla	10 g	50 min	7 %
Boil	Hallertau Tradition	15 g	25 min	5.6 %