

## #61 Brown Porter

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **23**
- SRM **24.8**
- Style **Brown Porter**

### Batch size

- Expected quantity of finished beer **8.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **9.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **11.2 liter(s)**

### Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.4 liter(s)**

### Steps

- Temp **68 C**, Time **120 min**

### Mash step by step

- Heat up **6.9 liter(s)** of strike water to **76.9C**
- Add grains
- Keep mash **120 min** at **68C**
- Sparge using **6.9 liter(s)** of **76C** water or to achieve **11.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński (Castle, Viking, Bydgoszcz)	1.04 kg (41%)	79 %	10
Grain	Rye Malt (Castle)	0.21 kg (8%)	63 %	10
Grain	Płatki owsiane	0.07 kg (2.7%)	85 %	3
Grain	Strzegom Monachijski typ II (Viking)	0.55 kg (21.4%)	79 %	22
Grain	Weyermann - Smoked Malt	0.12 kg (4.7%)	81 %	6
Grain	Abbey Malt Weyermann	0.08 kg (3.1%)	75 %	45
Grain	Weyermann Caramunich 3	0.16 kg (6.4%)	76 %	150
Grain	Special B Malt	0.13 kg (5.4%)	65.2 %	315
Grain	Castle Cafe Light	0.07 kg (2.7%)	75.5 %	250
Grain	Weyermann - Chocolate Rye	0.08 kg (3.3%)	20 %	600
Grain	Carafa II	0.04 kg (1.3%)	70 %	812

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	9 g	40 min	10 %

Aroma (end of boil)	Fuggles	15 g	5 min	4.2 %
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## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	4.67 g	Danstar