

Englisch Brown Porter

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **25**
- SRM **21.5**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

Steps

- Temp **69 C**, Time **90 min**
- Temp **69 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **10 min** at **69C**
- Keep mash **90 min** at **69C**
- Keep mash **10 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.5 kg (77.8%)	80 %	7
Grain	Brown Malt (British Chocolate)	0.5 kg (11.1%)	71.9 %	175
Grain	Red Crystal	0.4 kg (8.9%)	71.3 %	400
Grain	Chocolate	0.1 kg (2.2%)	75 %	800

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	35 g	60 min	4.5 %
Boil	Fuggles	35 g	10 min	4.5 %