

Brown Porter

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **29**
- SRM **22.9**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **16 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **20.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.25 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **21 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **17 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **78C**
- Sparge using **7.2 liter(s)** of **76C** water or to achieve **20.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (75%)	80 %	5
Grain	Brown Malt (British Chocolate)	0.5 kg (12.5%)	70 %	187.5
Grain	Kawowy	0.2 kg (5%)	77 %	250
Grain	Pszeniczny Crystal	0.2 kg (5%)	79 %	157.5
Grain	Strzegom Czekoladowy ciemny	0.1 kg (2.5%)	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	25 g	60 min	5.8 %
Boil	Fuggles	25 g	15 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	200 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
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Fining	Mech Irlandzki	4 g	Boil	15 min
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