

Brown Porter

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **33**
- SRM **22.5**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.3 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 **68 C**, Time **90 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **8.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **13.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (74.1%)	80 %	6.5
Grain	Brown Malt (British Chocolate)	0.5 kg (18.5%)	70 %	150
Grain	Caraaroma	0.15 kg (5.6%)	78 %	400
Grain	Fawcett - Pszeniczny Czekoladowy	0.05 kg (1.9%)	73 %	1001

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	8 g	60 min	14.3 %
Boil	Fuggles	10 g	30 min	4.5 %
Boil	Fuggles	5 g	5 min	4.5 %
Boil	Styrian Golding	5 g	5 min	3.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	60 ml	---