

Brown porter

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **27**
- SRM **21.1**
- 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 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.5 kg (77.8%)	79 %	6
Grain	Fawcett - Brown	0.5 kg (11.1%)	72 %	180
Grain	karmelowy ciemny litovel	0.3 kg (6.7%)	75 %	160
Grain	Fawcett - Pszeniczny Czekoladowy	0.1 kg (2.2%)	73 %	1001
Grain	Weyermann - Carafa II	0.1 kg (2.2%)	70 %	837

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	15 g	60 min	6 %
Boil	Willamette	15 g	60 min	5 %
Boil	Cascade	10 g	20 min	6 %
Boil	Willamette	10 g	20 min	5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale