

Brown Porter

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **25**
- SRM **20.5**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (58.8%)	80 %	5
Grain	Strzegom Monachijski typ I	1.2 kg (23.5%)	79 %	16
Grain	Fawcett - Brown	0.35 kg (6.9%)	72 %	180
Grain	Weyermann Special W	0.25 kg (4.9%)	73 %	280
Grain	Fawcett - Dark Crystal	0.15 kg (2.9%)	71 %	300
Grain	Fawcett - Pszeniczny Czekoladowy	0.15 kg (2.9%)	73 %	1001

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galena	10 g	60 min	12 %
Aroma (end of boil)	First Gold	25 g	10 min	7.5 %
Aroma (end of boil)	Bramling	25 g	10 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
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FM13 Irlandzkie Ciemności	Ale	Liquid	30 ml	Fermentum Mobile
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Notes

- Siege of Boralus
Feb 26, 2019, 7:32 PM