

Porter Gryczany

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **25**
- SRM **18.5**
- 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 **12 %/h**
- Boil size **13.6 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **10 liter(s)**
- Total mash volume **12.5 liter(s)**

Steps

- Temp **69 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **10 liter(s)** of strike water to **75.1C**
- Add grains
- Keep mash **60 min** at **69C**
- Keep mash **5 min** at **78C**
- Sparge using **6.1 liter(s)** of **76C** water or to achieve **13.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.35 kg (54%)	80 %	5
Grain	Gryczany	0.5 kg (20%)	65 %	10
Grain	Monachijski	0.25 kg (10%)	80 %	16
Grain	Fawcett - Brown	0.15 kg (6%)	72 %	180
Grain	Fawcett - Dark Crystal	0.15 kg (6%)	71 %	300
Grain	Fawcett - Pale Chocolate	0.1 kg (4%)	71 %	600

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	23 g	60 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM12 W szkocką krąg	Ale	Slant	200 ml	Fermentum Mobile