

Porter gryczany 14blg TB

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **34**
- SRM **30.7**
- Style **Robust Porter**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **18 %/h**
- Boil size **33.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **26.6 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **20.2 liter(s)** of **76C** water or to achieve **33.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.25 kg (33.8%)	80 %	5
Grain	Monachijski	1.25 kg (18.8%)	80 %	16
Grain	gryczany	1.9 kg (28.6%)	65 %	---
Grain	Viking melanoidynowy	0.25 kg (3.8%)	75 %	60
Grain	Strzegom Karmel 300	0.4 kg (6%)	70 %	299
Grain	Strzegom Czekoladowy 400	0.25 kg (3.8%)	68 %	400
Grain	Strzegom Czekoladowy 1200	0.35 kg (5.3%)	68 %	1202

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	25 g	60 min	10.5 %
Boil	East Kent Goldings	37 g	20 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Danstar - Windsor Ale	Ale	Dry	11 g	Danstar
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Extras

Type	Name	Amount	Use for	Time
Fining	WHIRLFLOC	1.2 g	Boil	5 min