

brown porter

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **26**
- SRM **24.1**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **14.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.1 kg (63.3%)	80 %	6
Grain	Strzegom Karmelowy 200	0.5 kg (10.2%)	75 %	200
Grain	Strzegom cookie Bursztynowy	0.5 kg (10.2%)	70 %	49
Grain	Strzegom Czekoladowy jasny	0.2 kg (4.1%)	68 %	400
Grain	Viking melanoidynowy	0.5 kg (10.2%)	75 %	70
Adjunct	Strzegom Barwiący 1600	0.1 kg (2%)	1 %	1600

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	20 g	60 min	7.3 %
Aroma (end of boil)	East Kent Goldings	10 g	30 min	5.27 %
Aroma (end of boil)	Challenger	10 g	15 min	7.3 %
Whirlpool	East Kent Goldings	20 g	1 min	5.27 %

Yeasts

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar

Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	15 min