

#33 Angielski porter

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **18**
- SRM **26.3**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **21.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **80 C**, Time **1 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **80C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **21.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	3.5 kg (77.8%)	80 %	16
Grain	Special B Malt	0.3 kg (6.7%)	65.2 %	315
Grain	Brown Malt (British Chocolate)	0.2 kg (4.4%)	70 %	128
Grain	Melanoiden Malt	0.15 kg (3.3%)	80 %	39
Grain	Weyermann - Chocolate Rye	0.15 kg (3.3%)	20 %	493
Grain	Weyermann - Carafa I	0.1 kg (2.2%)	70 %	690
Grain	Carafa III	0.1 kg (2.2%)	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Golding	30 g	60 min	3.6 %
Boil	Styrian Golding	20 g	20 min	3.6 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	4 g	Mash	60 min