

# Porter angielski

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **28**
- SRM **29**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **13 liter(s)**

## Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **9.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	2 kg (61.5%)	80 %	7
Grain	Strzegom Monachijski typ I	0.35 kg (10.8%)	79 %	16
Grain	Słód Caramunich Typ II Weyermann	0.15 kg (4.6%)	73 %	120
Grain	Biscuit Malt	0.2 kg (6.2%)	79 %	45
Grain	Czekoladowy	0.35 kg (10.8%)	60 %	690
Grain	Brown Malt (British Chocolate)	0.2 kg (6.2%)	70 %	200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Oktawia	16 g	60 min	7.1 %
Boil	Fuggles	15 g	20 min	4.2 %
Boil	Fuggles	5 g	5 min	4.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	8 g	Fermentis

## Notes

- Brown i chocolate w 60 minucie  
*Sep 27, 2023, 10:14 PM*