

# Porter angielski

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- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **31**
- SRM **18.2**
- 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**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- 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	Strzegom Pale Ale	4.4 kg (91.7%)	79 %	6
Grain	Strzegom Karmel 150	0.2 kg (4.2%)	75 %	150
Grain	Strzegom Czekoladowy ciemny	0.1 kg (2.1%)	68 %	1200
Grain	Jęczmień palony	0.1 kg (2.1%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	30 g	60 min	7 %
Boil	Fuggles	15 g	20 min	4.5 %
Boil	Fuggles	15 g	10 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa Porter	Ale	Dry	11 g	gozdawa