

# Angielski porter

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- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **24**
- SRM **27.6**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **6 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **13.5 %/h**
- Boil size **33.6 liter(s)**

## Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **77C**
- Sparge using **20.6 liter(s)** of **76C** water or to achieve **33.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.6 kg (55.4%)	85 %	7
Grain	Pilzneński 3,2-4,5 EBC Viking Malt	1 kg (15.4%)	80 %	4
Grain	Caraaroma	0.3 kg (4.6%)	78 %	400
Grain	Weyermann - Carafa I	0.1 kg (1.5%)	70 %	690
Grain	Płatki owsiane błyskawiczne	1.2 kg (18.5%)	70 %	4
Grain	Carafa Special (R) typ III Weyermann	0.3 kg (4.6%)	65 %	1400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Willamette	30 g	20 min	4.5 %
Boil	Pionner	10 g	55 min	8.8 %
Boil	Lublin (Lubelski)	30 g	55 min	3.9 %
Boil	Pionner	20 g	5 min	8.8 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale S-04	Ale	Dry	11.5 g	---