

# Angielski Porter

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **23**
- SRM **22.8**
- 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 **4.6 liter(s) / kg**
- Mash size **24.1 liter(s)**
- Total mash volume **29.4 liter(s)**

## Steps

- Temp **67.5 C**, Time **60 min**

## Mash step by step

- Heat up **24.1 liter(s)** of strike water to **72.7C**
- Add grains
- Keep mash **60 min** at **67.5C**
- Sparge using **6.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Malt Viking	3.5 kg (66.7%)	80 %	6
Grain	Vienna Malt	0.7 kg (13.3%)	78 %	8
Grain	Strzegom Karmel 150	0.6 kg (11.4%)	75 %	150
Grain	Strzegom Czekoladowy jasny	0.3 kg (5.7%)	68 %	400
Grain	Jęczmień palony	0.15 kg (2.9%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	10 g	60 min	5.1 %
Boil	East Kent Goldings	15 g	30 min	5.1 %
Boil	East Kent Goldings	30 g	10 min	5.1 %
Boil	East Kent Goldings	45 g	5 min	5.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 1028 London Ale	Ale	Liquid	1 ml	Wyeast Labs