

# Porter Angielski

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **25**
- SRM **25.9**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **12.6 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **10.1 liter(s)** of strike water to **71.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **5.6 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	1.8 kg (71.4%)	81 %	4
Grain	Abbey Castle	0.2 kg (7.9%)	80 %	45
Grain	Special B Malt	0.2 kg (7.9%)	65.2 %	315
Grain	Strzegom Wiedeński	0.2 kg (7.9%)	79 %	10
Grain	Chocolate Malt (UK)	0.12 kg (4.8%)	73 %	1175

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Izabella	10 g	60 min	5.1 %
Boil	lunga'10	5 g	60 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP001 - California Ale Yeast	Ale	Slant	80 ml	White Labs