

# porter angielski

- Gravity **12.1 BLG**
- ABV ---
- IBU **30**
- SRM **26.6**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 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 **90 min**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2 kg (41.7%)	80 %	4
Grain	Strzegom Pale Ale	1 kg (20.8%)	79 %	6
Grain	Peat Smoked Malt	1 kg (20.8%)	74 %	6
Grain	Strzegom Karmel 300	0.5 kg (10.4%)	70 %	299
Grain	Strzegom Czekoladowy jasny	0.3 kg (6.3%)	68 %	400

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	40 g	60 min	5.1 %
Aroma (end of boil)	East Kent Goldings	20 g	15 min	5.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	płatki dębowe	25 g	Secondary	5 day(s)