

# Porter Angielski

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **20**
- SRM **32**
- 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 **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **56 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **6.7 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2.3 kg (76.7%)	85 %	7
Grain	Strzegom Czekoladowy ciemny	0.2 kg (6.7%)	68 %	1200
Grain	Strzegom Karmel 300	0.2 kg (6.7%)	70 %	299
Grain	Płatki owsiane	0.3 kg (10%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	15 g	60 min	4.5 %
Boil	Tomyski	15 g	15 min	2.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	250 ml	---

## Extras

Type	Name	Amount	Use for	Time
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Fining	Mech Irlandzki	2 g	Boil	15 min
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## Notes

- Dodać sól Strzegom Czekoladowy ciemny na koniec zacierania (10-15 min.)  
Dodać łuskę ryżową 150 g na wygrzew.  
*Feb 4, 2021, 8:56 PM*