

# Porter Angielski z Piwowara

- Gravity **20 BLG**
- ABV **8.8 %**
- IBU **19**
- SRM **24.7**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **27.5 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **18.3 liter(s)** of strike water to **78.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **76C**
- Sparge using **18.7 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	8 kg (87.4%)	79 %	6
Grain	Brown Malt (Thomas Fawcett & Sons)	0.5 kg (5.5%)	71.9 %	188
Grain	Palony Kawowy (CastleMalting)	0.25 kg (2.7%)	75.5 %	470
Grain	Strzegom Czekoladowy ciemny	0.15 kg (1.6%)	68 %	1200
Grain	Weyermann - Carawheat	0.25 kg (2.7%)	77 %	125

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	70 min	10 %
Boil	Lublin (Lubelski)	20 g	20 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM10 O czym szumią wierzby	Ale	Liquid	200 ml	Fermentum Mobile

## Notes

- W Piwowarze było 3kg słodu pale ale na 20l° 19,5 blg  
*Jun 23, 2017, 8:15 PM*