

Angielski porter

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **32**
- SRM **23.8**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **80 min**
- Evaporation rate **12 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.9 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30.1 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **69.6C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **10 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (48.8%)	85 %	7
Grain	Wiedeński	2 kg (32.5%)	79 %	10
Grain	Caraaroma	0.3 kg (4.9%)	78 %	400
Grain	Carahell	0.5 kg (8.1%)	77 %	26
Grain	Fawcett - Pszeniczny Czekoladowy	0.25 kg (4.1%)	73 %	1001
Grain	Weyermann - Acidulated Malt	0.1 kg (1.6%)	80 %	6

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	45 g	50 min	7.6 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM10 O czym szumią wierzby	Ale	Slant	150 ml	Fermentum Mobile

Extras

Type	Name	Amount	Use for	Time
Fining	whirflock	1.5 g	Boil	5 min