Porter angielski

- Gravity **10 BLG**
- ABV **---**
- IBU **31**
- SRM **26.4**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.2 liter(s)**
- Total mash volume **19.6 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **15.2 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **30 min** at **72C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.2 kg *(73.6%)*	85 %	7
Grain	Strzegom Czekoladowy ciemny	0.25 kg *(5.7%)*	68 %	1200
Grain	Carafa II	0.1 kg *(2.3%)*	70 %	812
Grain	Simpsons - Crystal Rye	0.3 kg *(6.9%)*	73 %	177
Grain	Biscuit Malt	0.5 kg *(11.5%)*	79 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	flyer	10 g	60 min	9.8 %
Boil	flyer	20 g	20 min	9.8 %
Boil	flyer	20 g	5 min	9.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP002 - English Ale Yeast	Ale	Liquid	100 ml	White Labs

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.