

# English Porter #1

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **22**
- SRM **19.4**
- 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.6 kg (80%)	85 %	7
Grain	Caraaroma	0.3 kg (6.7%)	78 %	400
Grain	Carafa	0.1 kg (2.2%)	70 %	664
Grain	Strzegom Monachijski typ I	0.4 kg (8.9%)	79 %	16
Grain	Jęczmień palony	0.1 kg (2.2%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Pioneer	20 g	60 min	8.8 %
Boil	Pioneer	10 g	10 min	8.8 %
Aroma (end of boil)	Willamette	30 g	0 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	200 ml	Safale