

## Brown Porter nowy

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **24**
- SRM **20**
- Style **Brown Porter**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **19.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **16.5 liter(s)**

### Steps

- Temp **70 C**, Time **90 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **12.8 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **90 min** at **70C**
- Keep mash **1 min** at **76C**
- Sparge using **10.8 liter(s)** of **76C** water or to achieve **19.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	2.68 kg (73.2%)	81 %	6
Grain	Fawcett - Crystal	0.2 kg (5.5%)	70 %	160
Grain	Chocolate Malt (UK)	0.15 kg (4.1%)	73 %	887
Grain	Brown Malt (British Chocolate)	0.2 kg (5.5%)	70 %	128
Grain	Black (Patent) Malt	0.03 kg (0.8%)	55 %	985
Grain	Platki owsiane	0.4 kg (10.9%)	60 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	14 g	60 min	12 %