

## brown porter 2

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **20**
- SRM **22**
- Style **Brown Porter**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18.9 liter(s)**

### Steps

- Temp **70 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **90 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	4 kg (74.1%)	80 %	16
Grain	Brown Malt (British Chocolate)	0.5 kg (9.3%)	70 %	128
Grain	Caraamber	0.5 kg (9.3%)	75 %	59
Grain	Strzegom Czekoladowy ciemny	0.2 kg (3.7%)	68 %	1200
Grain	diastatyczny	0.2 kg (3.7%)	80 %	2.5

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	40 g	60 min	4.5 %
Boil	East Kent Goldings	10 g	15 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale