

# Brown Porter

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **21**
- SRM **25.2**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **22.9 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **69 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **22.9 liter(s)** of strike water to **74.5C**
- Add grains
- Keep mash **70 min** at **69C**
- Keep mash **5 min** at **76C**
- Sparge using **5 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.7 kg (72.5%)	79 %	6
Grain	Brown Malt (British Chocolate)	0.5 kg (9.8%)	70 %	175
Grain	Red Crystal 400 EBC	0.5 kg (9.8%)	71.3 %	400
Grain	Słód owsiany Fawcett	0.3 kg (5.9%)	61 %	5
Grain	pszeniczny czekoladowy	0.1 kg (2%)	72.7 %	887

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	30 g	60 min	5 %
Boil	Fuggles	20 g	5 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	11 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Fining	Whirfloc	6 g	Boil	15 min
Other	gips piwowarski	6 g	Mash	70 min