

# Brown Porter

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **28**
- SRM **21.5**
- 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 **5 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.75 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **20.3 liter(s)** of strike water to **73.3C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **10.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (46.3%)	81 %	4
Grain	Monachijski typ II 20-25 EBC Weyermann	1 kg (18.5%)	80 %	20
Grain	Biscuit Malt	0.6 kg (11.1%)	79 %	45
Grain	Monachijski	0.5 kg (9.3%)	80 %	16
Grain	Brown Malt (British Chocolate)	0.5 kg (9.3%)	70 %	128
Grain	Fawcett - Pale Chocolate	0.15 kg (2.8%)	71 %	600
Grain	Fawcett - Pszeniczny Czekoladowy	0.15 kg (2.8%)	73 %	1001

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	100 ml	Safale

## Extras

Type	Name	Amount	Use for	Time
Water Agent	lactic acid	5 g	Mash	60 min
Water Agent	caso4	5 g	Mash	60 min
Fining	whirlfloc-t	2.5 g	Boil	10 min