

# Brown Porter

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- Gravity **12.8 BLG**
- ABV ---
- IBU **41**
- SRM **32.4**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.6 liter(s)**
- Total mash volume **14.1 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**
- Temp **78 C**, Time **19 min**

## Mash step by step

- Heat up **10.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **19 min** at **78C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.415 kg (68.4%)	80 %	6
Grain	Pilzneński	0.5 kg (14.2%)	81 %	4
Grain	Brown Malt (British Chocolate)	0.414 kg (11.7%)	70 %	175
Grain	Czekoladowy	0.2 kg (5.7%)	60 %	1000

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	100 ml	Fermentum Mobile