

# n°1 Brown Porter

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- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **20**
- SRM **21.9**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **40 min**
- Evaporation rate **10 %/h**
- Boil size **33.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.3 liter(s)**
- Total mash volume **31 liter(s)**

## Steps

- Temp **63 C**, Time **100 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **23.3 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **100 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **33.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (64.5%)	80 %	5
Grain	Brown Malt (British Chocolate)	1 kg (12.9%)	70 %	128
Grain	Płatki owsiane	1 kg (12.9%)	85 %	3
Grain	Strzegom Czekoladowy ciemny	0.25 kg (3.2%)	68 %	1200
Grain	Biscuit Malt	0.25 kg (3.2%)	79 %	45
Grain	Caramel/Crystal Malt - 40L	0.25 kg (3.2%)	74 %	79

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	40 min	10 %
Aroma (end of boil)	Marynka	25 g	5 min	10 %

## Yeasts

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