

# Brown Porter

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **25**
- SRM **22.1**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.7 liter(s)**
- Total mash volume **17.6 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **13.7 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	3 kg (68.2%)	80.5 %	4
Adjunct	Płatki owsiane	0.5 kg (11.4%)	60 %	4
Grain	Brown Thomas Fawcett	0.5 kg (11.4%)	75 %	188
Grain	Castle Malting Cafe	0.2 kg (4.5%)	75.5 %	480
Grain	Fawcett - Pszeniczny Czekoladowy	0.2 kg (4.5%)	73 %	900

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	45 g	60 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
------	------	--------	---------	------

Water Agent	Gips piwowarski	4 g	Mash	70 min
Fining	Whirlfloc	1.25 g	Boil	10 min
Flavor	Suszone skórki Bergamotki	20 g	Boil	15 min
Flavor	Sok z 3 pomarańczy i zest	250 g	Boil	0 min
Flavor	Laska wanilii Bourbon	12 g	Secondary	3 day(s)

## Notes

- Sól Pszeniczny Czekoladowy dodany pod koniec przerwy 72C.  
Sok i zest z 3 pomarańczy dodany po wyłączeniu grzania.  
Laska wanilii przekrojona wzdłuż , macerowana 1 dzień w odrobinie whisky.  
*Nov 2, 2022, 9:30 AM*