

# Chocolate Porter

- Gravity **15.2 BLG**
- ABV ---
- IBU **32**
- SRM **36.8**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **15 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **14.4 liter(s)**

## Mash information

- Mash efficiency **69 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **13.4 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **10.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **14.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	2.5 kg (74.6%)	80.5 %	6
Grain	Pszeniczny	0.2 kg (6%)	80 %	4
Grain	Fawcett - Dark Crystal	0.2 kg (6%)	71 %	300
Grain	Caraaroma	0.15 kg (4.5%)	78 %	400
Grain	Brown Malt (British Chocolate)	0.2 kg (6%)	70 %	128
Grain	Carafa II	0.1 kg (3%)	70 %	812

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	15 g	60 min	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Spice	Kakao odtłuszczone	250 g	Boil	10 min
Spice	Sól	15 g	Boil	30 min