

# chocolate porter

- Gravity **15 BLG**
- ABV ---
- IBU **22**
- SRM **23.2**
- Style **Robust Porter**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **6 %**
- Size with trub loss **25.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

## Steps

- Temp **68 C**, Time **75 min**

## Mash step by step

- Heat up **20.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **75 min** at **68C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **31.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2 kg (29.9%)	85 %	7
Grain	Weyermann - Pale Wheat Malt	0.8 kg (11.9%)	85 %	5
Grain	Weyermann - Carapils	0.5 kg (7.5%)	78 %	4
Grain	Weyermann - Light Munich Malt	1 kg (14.9%)	82 %	14
Grain	Abbey Castle	1 kg (14.9%)	80 %	45
Grain	Fawcett - Brown	0.5 kg (7.5%)	72 %	180
Grain	Strzegom Czekoladowy 400	0.25 kg (3.7%)	68 %	400
Grain	Weyermann - Carafa I	0.25 kg (3.7%)	70 %	690
Grain	Oats, Flaked	0.4 kg (6%)	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Willamette	50 g	60 min	5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Safale US-05	Ale	Dry	11.5 g	Fermentis
--------------	-----	-----	--------	-----------

### Extras

Type	Name	Amount	Use for	Time
Flavor	Oak Chips	30 g	Secondary	30 day(s)

### Notes

- 12.02 przelany na fermentacje...  
fermentacja 12 dni, temperatura 16,5 podnoszona do 19,5 po 5 dni...  
*Feb 22, 2017, 11:05 AM*