

# Chocolate brown porter

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **26**
- SRM **23.4**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **32.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.4 liter(s)**
- Total mash volume **27.5 liter(s)**

## Steps

- Temp **69 C**, Time **75 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **21.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **75 min** at **69C**
- Keep mash **5 min** at **76C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **32.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	4 kg (65.6%)	83 %	6
Grain	Monachijski typ II 20-25 EBC Weyermann	1 kg (16.4%)	80 %	20
Grain	Strzegom Czekoladowy jasny	0.5 kg (8.2%)	68 %	400
Grain	Crystal Light 160-180 EBC Crisp	0.45 kg (7.4%)	75 %	170
Grain	Carafa III	0.15 kg (2.5%)	70 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	18 g	60 min	14.3 %
Boil	Fuggles	25 g	10 min	4.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	300 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	ziarno kakaowca	150 g	Secondary	14 day(s)