

Chocolate Brown Porter

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **22**
- SRM **25**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **45 min**
- Evaporation rate **10 %/h**
- Boil size **14.8 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **13.1 liter(s)**
- Total mash volume **16.9 liter(s)**

Steps

- Temp **65 C**, Time **35 min**
- Temp **72 C**, Time **35 min**

Mash step by step

- Heat up **13.1 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **35 min** at **65C**
- Keep mash **35 min** at **72C**
- Sparge using **5.5 liter(s)** of **76C** water or to achieve **14.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale (W)	3 kg (80%)	85 %	7
Grain	Brown (Fawcett)	0.3 kg (8%)	72 %	180
Grain	Dark Crystal (Fawcett)	0.25 kg (6.7%)	72 %	210
Grain	Special B (Castle)	0.1 kg (2.7%)	70 %	350
Grain	Chocolate Wheat (W)	0.1 kg (2.7%)	74 %	1000

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	challanger 2020	25 g	20 min	6.1 %
Boil	challanger 2020	25 g	5 min	6.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - 1728 Scottish Ale	Ale	Liquid	1000 ml	Wyeast Labs

Extras

Type	Name	Amount	Use for	Time
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Water Agent	gips	1 g	Mash	60 min
Water Agent	chlorek wapnia	1 g	Mash	60 min
Water Agent	kreda	3.5 g	Mash	60 min
Water Agent	sól kuchenna	1 g	Mash	60 min
Fining	whirflock	1 g	Boil	5 min
Flavor	śruta kakowa	500 g	Secondary	5 day(s)