

# American Brown porter

- Gravity **12.8 BLG**
- ABV ---
- IBU **50**
- SRM **31.6**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **10 %**
- Size with trub loss **33 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **36.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.3 liter(s)**
- Total mash volume **27 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **20.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **22.8 liter(s)** of **76C** water or to achieve **36.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	4 kg (59.3%)	85 %	7
Grain	Caraaroma	0.25 kg (3.7%)	78 %	400
Grain	żytni czekoladwy	0.25 kg (3.7%)	78 %	650
Grain	Caraamber	1 kg (14.8%)	75 %	59
Grain	Special B Malt	0.25 kg (3.7%)	77 %	290
Grain	cara-crystal	0.5 kg (7.4%)	78 %	120
Grain	Aroma 150 EBC Brewferm	0.5 kg (7.4%)	78 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	simcoe	15 g	60 min	11.4 %
Boil	simcoe	10 g	30 min	11.4 %
Boil	simcoe	10 g	10 min	11.4 %
Boil	waiema	10 g	60 min	17.3 %
Boil	waiema	10 g	30 min	17.3 %
Boil	waiema	10 g	10 min	17.3 %

Dry Hop	waiema	20 g	3 day(s)	17.3 %
Dry Hop	simcoe	15 g	3 day(s)	11.4 %
Dry Hop	Pacific Jade	50 g	3 day(s)	14.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis