

English Brown Porter

- Gravity **12.1 BLG**
- ABV ---
- IBU **35**
- SRM **29.5**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **67 C**, Time **90 min**
- Temp **67 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **10 min** at **67C**
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|-------|-----|
| Grain | Castle Pale Ale | 3.5 kg (77.8%) | 80 % | 8 |
| Grain | Brown Malt (British Chocolate) | 0.5 kg (11.1%) | 70 % | 128 |
| Grain | Red Crystal | 0.4 kg (8.9%) | 75 % | 400 |
| Grain | Briess - Chocolate Malt | 0.1 kg (2.2%) | 60 % | 690 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Fuggles | 55 g | 60 min | 4.5 % |
| Aroma (end of boil) | Fuggles | 20 g | 10 min | 4.5 % |