

Brown Porter

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **33**
- SRM **22.5**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.1 liter(s)**
- Total mash volume **10.8 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **8.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **13.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 2 kg (74.1%) | 80 % | 6.5 |
| Grain | Brown Malt (British Chocolate) | 0.5 kg (18.5%) | 70 % | 150 |
| Grain | Caraaroma | 0.15 kg (5.6%) | 78 % | 400 |
| Grain | Fawcett - Pszeniczny Czekoladowy | 0.05 kg (1.9%) | 73 % | 1001 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------|--------|--------|------------|
| Boil | Admiral | 8 g | 60 min | 14.3 % |
| Boil | Fuggles | 10 g | 30 min | 4.5 % |
| Boil | Fuggles | 5 g | 5 min | 4.5 % |
| Boil | Styrian Golding | 5 g | 5 min | 3.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 60 ml | --- |