

# Brown Porter

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **23**
- SRM **24.8**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **18.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **15.2 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **11.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **18.5 liter(s)** of wort

## Fermentables

| Type                          | Name                             | Amount         | Yield | EBC  |
|-------------------------------|----------------------------------|----------------|-------|------|
| Grain                         | Viking Pale Ale malt             | 2.6 kg (68.4%) | 80 %  | 5    |
| Grain                         | Brown Malt (British Chocolate)   | 0.3 kg (7.9%)  | 70 %  | 128  |
| Grain                         | Strzegom Karmel 150              | 0.3 kg (7.9%)  | 75 %  | 150  |
| Zamiast tego użyć crystal 120 |                                  |                |       |      |
| Grain                         | Fawcett - Pszeniczny Czekoladowy | 0.1 kg (2.6%)  | 73 %  | 1001 |
| dac 200g                      |                                  |                |       |      |
| Grain                         | Płatki owsiane                   | 0.4 kg (10.5%) | 85 %  | 3    |
| Grain                         | Carafa II                        | 0.1 kg (2.6%)  | 70 %  | 1200 |

## Hops

| Use for      | Name    | Amount | Time   | Alpha acid |
|--------------|---------|--------|--------|------------|
| Boil         | Fuggles | 15 g   | 60 min | 6.1 %      |
| można dać 20 |         |        |        |            |
| Boil         | Fuggles | 20 g   | 15 min | 6.1 %      |
| można dać 25 |         |        |        |            |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 10 g   | Safale     |