

# BrownieeEEe

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **20**
- SRM **24.9**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **16.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount         | Yield | EBC  |
|-------|--------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt     | 3.5 kg (65.4%) | 80 %  | 5    |
| Grain | Fawcett - Amber malt     | 0.5 kg (9.3%)  | 75 %  | 140  |
| Grain | Fawcett - Brown          | 0.5 kg (9.3%)  | 72 %  | 180  |
| Grain | Fawcett - Pale Chocolate | 0.2 kg (3.7%)  | 71 %  | 600  |
| Grain | Weyermann - Rye Malt     | 0.5 kg (9.3%)  | 85 %  | 7    |
| Grain | Fawcett - Chocolate      | 0.15 kg (2.8%) | 60 %  | 1200 |

## Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 15 g   | 60 min | 12.9 %     |

## Yeasts

| Name                      | Type | Form   | Amount | Laboratory       |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Liquid | 100 ml | Fermentum Mobile |