

# n°1 Brown Porter

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **20**
- SRM **21.9**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **40 min**
- Evaporation rate **10 %/h**
- Boil size **33.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.3 liter(s)**
- Total mash volume **31 liter(s)**

## Steps

- Temp **63 C**, Time **100 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **23.3 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **100 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **33.2 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield | EBC  |
|-------|--------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt           | 5 kg (64.5%)   | 80 %  | 5    |
| Grain | Brown Malt (British Chocolate) | 1 kg (12.9%)   | 70 %  | 128  |
| Grain | Płatki owsiane                 | 1 kg (12.9%)   | 85 %  | 3    |
| Grain | Strzegom Czekoladowy ciemny    | 0.25 kg (3.2%) | 68 %  | 1200 |
| Grain | Biscuit Malt                   | 0.25 kg (3.2%) | 79 %  | 45   |
| Grain | Caramel/Crystal Malt - 40L     | 0.25 kg (3.2%) | 74 %  | 79   |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Marynka | 25 g   | 40 min | 10 %       |
| Aroma (end of boil) | Marynka | 25 g   | 5 min  | 10 %       |

## Yeasts

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