

# Brown Porter

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **31**
- SRM **27.2**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **0 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **15.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński         | 4 kg (78.4%)   | 80 %  | 4   |
| Grain | Weyermann - Chocolate Rye   | 0.15 kg (2.9%) | 20 %  | 493 |
| Grain | Fawcett - Brown             | 0.5 kg (9.8%)  | 72 %  | 180 |
| Grain | Weyermann - Chocolate Wheat | 0.15 kg (2.9%) | 74 %  | 788 |
| Grain | Caraaroma                   | 0.2 kg (3.9%)  | 78 %  | 400 |
| Grain | Weyermann - Carafa I        | 0.1 kg (2%)    | 70 %  | 690 |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Marynka | 25 g   | 60 min | 10 %       |
| Aroma (end of boil) | Marynka | 35 g   | 1 min  | 10 %       |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11 g   | Safale     |