

# Chocolate Porter

- Gravity **15.2 BLG**
- ABV ---
- IBU **32**
- SRM **36.8**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **15 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **14.4 liter(s)**

## Mash information

- Mash efficiency **69 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **13.4 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **10.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **25 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7.7 liter(s)** of **76C** water or to achieve **14.4 liter(s)** of wort

## Fermentables

| Type  | Name                           | Amount         | Yield  | EBC |
|-------|--------------------------------|----------------|--------|-----|
| Grain | BESTMALZ - Bestt Pale Ale      | 2.5 kg (74.6%) | 80.5 % | 6   |
| Grain | Pszeniczny                     | 0.2 kg (6%)    | 80 %   | 4   |
| Grain | Fawcett - Dark Crystal         | 0.2 kg (6%)    | 71 %   | 300 |
| Grain | Caraaroma                      | 0.15 kg (4.5%) | 78 %   | 400 |
| Grain | Brown Malt (British Chocolate) | 0.2 kg (6%)    | 70 %   | 128 |
| Grain | Carafa II                      | 0.1 kg (3%)    | 70 %   | 812 |

## Hops

| Use for | Name   | Amount | Time   | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil    | Target | 15 g   | 60 min | 10.5 %     |

## Yeasts

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

## Extras

| Type  | Name               | Amount | Use for | Time   |
|-------|--------------------|--------|---------|--------|
| Spice | Kakao odtłuszczone | 250 g  | Boil    | 10 min |
| Spice | Sól                | 15 g   | Boil    | 30 min |