

# Chocolate brown porter

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **26**
- SRM **23.4**
- Style **Brown Porter**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **32.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.4 liter(s)**
- Total mash volume **27.5 liter(s)**

## Steps

- Temp **69 C**, Time **75 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **21.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **75 min** at **69C**
- Keep mash **5 min** at **76C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **32.4 liter(s)** of wort

## Fermentables

| Type  | Name   | Amount         | Yield | EBC  |
|-------|--|----------------|-------|------|
| Grain | Maris Otter Crisp                            | 4 kg (65.6%)   | 83 %  | 6    |
| Grain | Monachijski typ II<br>20-25 EBC<br>Weyermann | 1 kg (16.4%)   | 80 %  | 20   |
| Grain | Strzegom<br>Czekoladowy jasny                | 0.5 kg (8.2%)  | 68 %  | 400  |
| Grain | Crystal Light<br>160-180 EBC Crisp           | 0.45 kg (7.4%) | 75 %  | 170  |
| Grain | Carafa III                                   | 0.15 kg (2.5%) | 70 %  | 1200 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Admiral | 18 g   | 60 min | 14.3 %     |
| Boil    | Fuggles | 25 g   | 10 min | 4.4 %      |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 300 ml | Fermentis  |

## Extras

| Type   | Name            | Amount | Use for   | Time      |
|--------|-----------------|--------|-----------|-----------|
| Flavor | ziarno kakaowca | 150 g  | Secondary | 14 day(s) |