

brown porter 2

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **20**
- SRM **22**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18.9 liter(s)**

Steps

- Temp **70 C**, Time **90 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **90 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **19.5 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|---------------|-------|------|
| Grain | Monachijski | 4 kg (74.1%) | 80 % | 16 |
| Grain | Brown Malt (British Chocolate) | 0.5 kg (9.3%) | 70 % | 128 |
| Grain | Caraamber | 0.5 kg (9.3%) | 75 % | 59 |
| Grain | Strzegom Czekoladowy ciemny | 0.2 kg (3.7%) | 68 % | 1200 |
| Grain | diastatyczny | 0.2 kg (3.7%) | 80 % | 2.5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | East Kent Goldings | 40 g | 60 min | 4.5 % |
| Boil | East Kent Goldings | 10 g | 15 min | 4.5 % |

Yeasts

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