

Brown porter

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **25**
- SRM **23.2**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt | 2 kg (35.1%) | 80 % | 5 |
| Grain | Oats, Flaked | 0.4 kg (7%) | 80 % | 2 |
| Grain | Monachijski | 2 kg (35.1%) | 80 % | 16 |
| Grain | Strzegom Karmel 150 | 0.5 kg (8.8%) | 75 % | 150 |
| Grain | Czekoladowy | 0.2 kg (3.5%) | 60 % | 800 |
| Grain | Strzegom Barwiący | 0.1 kg (1.8%) | 68 % | 1300 |
| Grain | Strzegom Karmel 30 | 0.5 kg (8.8%) | 75 % | 50 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Chinook | 20 g | 30 min | 8.5 % |
| Boil | Chinook | 30 g | 15 min | 8.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 150 ml | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

| | | | | |
|--------|-----------|-------|------|--------|
| Fining | Whirlfloc | 2.5 g | Boil | 10 min |
|--------|-----------|-------|------|--------|