

Brown Porter

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **26**
- SRM **25.4**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **19.8 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **14.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt | 4 kg (80.8%) | 80 % | 5 |
| Grain | Strzegom Karmel 300 | 0.4 kg (8.1%) | 70 % | 299 |
| Grain | Simpsons - Brown Malt | 0.5 kg (10.1%) | 70 % | 500 |
| Grain | Strzegom Czekoladowy ciemny | 0.04 kg (0.8%) | 68 % | 1200 |
| Grain | Strzegom Barwiący | 0.01 kg (0.2%) | 68 % | 1300 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil | Fuggles | 30 g | 60 min | 5.3 % |
| Aroma (end of boil) | Fuggles | 20 g | 30 min | 5.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Lallemand Voss Kveik | Ale | Dry | 11 g | --- |