

Brown Porter

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **21**
- SRM **22.6**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.2 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **6.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (87%)	80 %	5
Grain	Viking Czekoladowy ciemny	0.15 kg (6.5%)	67 %	900
Grain	Strzegom Karmel 300	0.15 kg (6.5%)	70 %	299

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	7.9 %
Aroma (end of boil)	Marynka	10 g	5 min	8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	6 g	Fermentis