

Brown Eyes

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **28**
- SRM **24.5**
- 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 **22 %/h**
- Boil size **14 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **8.8 liter(s)**
- Total mash volume **11 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **8.8 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **7.4 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.3 kg (59.1%)	90 %	5
Grain	Karmelowy Jasny 30EBC	0.4 kg (18.2%)	75 %	30
Grain	Weyermann - Carafa II	0.15 kg (6.8%)	70 %	1300
Grain	Płatki owsiane	0.35 kg (15.9%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	60 min	4 %
Boil	Sybilla	10 g	5 min	3.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM11 Wichrowe Wzgórza	Ale	Slant	70 ml	Fermentum Mobile