

Brown Ale

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **27**
- SRM **13.4**
- Style **Northern English Brown Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **21.4 liter(s)**

Steps

- Temp **55 C**, Time **10 min**
- Temp **65 C**, Time **10 min**
- Temp **66 C**, Time **10 min**
- Temp **68 C**, Time **10 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.1 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **10 min** at **65C**
- Keep mash **10 min** at **66C**
- Keep mash **10 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.5 kg (28%)	80 %	5
Grain	Simpsons - Maris Otter	1 kg (18.7%)	81 %	6
Grain	Pilzneński	1 kg (18.7%)	81 %	4
Grain	Fawcett - Brown	0.4 kg (7.5%)	72 %	180
Grain	Abbey Malt Weyermann	0.3 kg (5.6%)	75 %	45
Grain	Oats, Flaked	0.3 kg (5.6%)	80 %	2
Grain	Monachijski	0.3 kg (5.6%)	80 %	16
Grain	Simpsons - Crystal Dark	0.2 kg (3.7%)	74 %	158
Grain	Słód Caramunich Typ II Weyermann	0.2 kg (3.7%)	73 %	120
Grain	Caramel/Crystal Malt - 60L	0.15 kg (2.8%)	74 %	118

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11.5 %
Boil	Bramling	20 g	60 min	4.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP007 - Dry English Ale Yeast	Ale	Liquid	75 ml	White Labs

Extras

Type	Name	Amount	Use for	Time
Water Agent	Lactic Acid	7 g	Mash	60 min
Water Agent	CaSO4	7 g	Mash	60 min
Fining	Whirlfloc-T	2.5 g	Boil	10 min