

English brown ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **23**
- SRM **19.6**
- Style **Northern English Brown Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.7 liter(s)**
- Total mash volume **11.6 liter(s)**

Steps

- Temp **68 C**, Time **30 min**
- Temp **72 C**, Time **50 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **8.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **30 min** at **68C**
- Keep mash **50 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	2.3 kg (79.3%)	81 %	6
Grain	Płatki owsiane	0.2 kg (6.9%)	85 %	3
Grain	Czekoladowy	0.1 kg (3.4%)	60 %	1200
Grain	Caramel/Crystal Malt - 120L	0.15 kg (5.2%)	72 %	160
Grain	Brown Malt (British Chocolate)	0.15 kg (5.2%)	70 %	175

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Golding	10 g	60 min	6.2 %
Boil	Golding	20 g	15 min	6.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP002 - English Ale Yeast	Ale	Liquid	20 ml	White Labs