

# English Brown Ale

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- Gravity **13.1 BLG**
- ABV ---
- IBU **25**
- SRM **18.2**
- Style **American Brown Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **14.1 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (85.1%)	81 %	4
Grain	Strzegom Karmel 30	0.4 kg (8.5%)	75 %	30
Grain	Czekoladowy	0.1 kg (2.1%)	60 %	788
Grain	Simpsons - Coffee Malt	0.2 kg (4.3%)	74 %	296

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	16 g	60 min	10 %
Boil	East Kent Goldings	25 g	15 min	5.1 %
Aroma (end of boil)	Tradition	10 g	0 min	4.5 %
Aroma (end of boil)	East Kent Goldings	25 g	0 min	5.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	4 g	Mash	60 min