

# Brown Ale

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **33**
- SRM **17.4**
- Style **American Brown Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

## Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **12.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.5 kg (85.4%)	82.1 %	7.5
Grain	Carahell	0.4 kg (9.8%)	77.9 %	29
Grain	Carafa II	0.2 kg (4.9%)	70 %	1100

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade PL	15 g	5 min	5 %
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Boil	Puławski	30 g	60 min	7.6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

## Notes

- Zacierać godzinę w 62 stopniach, podgrzać do 72 i trzymać 20 minut do zatarcia się, wygrzew 76 stopni i wysłodzić aby było 21-22 litrów.  
Fermentacja 18-20 stopni 21 dni, zabutelkować i leżakować w 15 stopniach 20 dni.  
*Mar 20, 2020, 4:21 PM*