

# American Brown - kontrakt 1

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **34**
- SRM **13.5**
- Style **American Brown Ale**

## Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **5 %**
- Size with trub loss **63 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **75.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **51.3 liter(s)**
- Total mash volume **68.4 liter(s)**

## Steps

- Temp **50 C**, Time **10 min**
- Temp **62 C**, Time **20 min**
- Temp **68 C**, Time **20 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **51.3 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **20 min** at **62C**
- Keep mash **20 min** at **68C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **41.7 liter(s)** of **76C** water or to achieve **75.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Vienna Malt	13 kg (76%)	79 %	7
Grain	Weyermann - Carared	2 kg (11.7%)	75 %	45
Grain	Monachijski	1.7 kg (9.9%)	80 %	16
Grain	Czekoladowy	0.4 kg (2.3%)	60 %	788

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	45 g	60 min	13.5 %
Boil	Cascade	60 g	30 min	6 %
Whirlpool	Cascade	60 g	15 min	6 %
Dry Hop	Cascade	120 g	7 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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us-05	Ale	Dry	50 g	---
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