

## #34 American Brown Ale

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **36**
- SRM **22.9**
- Style **American Brown Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **4 %**
- Size with trub loss **24.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.6 liter(s) / kg**
- Mash size **22.3 liter(s)**
- Total mash volume **28.5 liter(s)**

### Steps

- Temp **67 C**, Time **70 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **22.3 liter(s)** of strike water to **73.5C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	5 kg (80.6%)	81 %	5
Grain	Biscuit Malt	0.5 kg (8.1%)	79 %	45
Grain	Chocolate fawcett	0.25 kg (4%)	60 %	1200
Grain	Caraaroma	0.25 kg (4%)	78 %	400
Grain	Płatki pszeniczne	0.2 kg (3.2%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	20 g	45 min	6.7 %
Boil	Columbus/Tomahawk/Zeus	10 g	45 min	16.8 %
Boil	Cascade	10 g	15 min	6.7 %
Boil	Columbus/Tomahawk/Zeus	10 g	15 min	16.8 %
Boil	Cascade	20 g	0 min	6.7 %
Boil	Columbus/Tomahawk/Zeus	30 g	0 min	16.8 %
Dry Hop	Cascade	50 g	4 day(s)	6.7 %

### Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
FM52 Amerykański Sen	Ale	Slant	200 ml	Fermentum Mobile