

## Brown Ale (24)

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- Gravity **14 BLG**
- ABV ---
- IBU **82**
- SRM **23.6**
- Style **American Brown Ale**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.9 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **31.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.8 liter(s)**
- Total mash volume **29.3 liter(s)**

### Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **22.8 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **31.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1.5 kg (23.1%)	79 %	6
Grain	Strzegom Monachijski typ I	3 kg (46.2%)	79 %	16
Grain	Strzegom Karmel 150	1.5 kg (23.1%)	75 %	150
Grain	Strzegom Pszeniczny	0.5 kg (7.7%)	81 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	50 g	60 min	15.5 %
Boil	Cascade	50 g	10 min	6 %
Dry Hop	Citra	50 g	6 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	---