

## Brown Ale #3

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **20**
- SRM **14.7**
- Style **American Brown Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4.5 kg (90%)	82 %	4
Grain	Strzegom Czekoladowy jasny	0.5 kg (10%)	68 %	400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	6.4 %
Whirlpool	Zythos	90 g	0 min	11 %
Dry Hop	Zythos	90 g	5 day(s)	11 %

### Yeasts

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

### Extras

Type	Name	Amount	Use for	Time
Herb	kafir	10 g	Secondary	5 day(s)