

## American Stout 13

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **42**
- SRM **41.3**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **3 %**
- Size with trub loss **10.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **12.9 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.8 liter(s)**
- Total mash volume **9 liter(s)**

### Steps

- Temp **68 C**, Time **70 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **6.8 liter(s)** of strike water to **75.9C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **8.4 liter(s)** of **76C** water or to achieve **12.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.35 kg (51.7%)	80 %	5
Grain	Strzegom Monachijski typ I	0.5 kg (19.2%)	79 %	16
Grain	Simpsons - Coffee Malt	0.25 kg (9.6%)	74 %	296
Grain	Strzegom Karmel 300	0.15 kg (5.7%)	70 %	299
Adjunct	Jęczmień palony	0.23 kg (8.8%)	55 %	985
Adjunct	Briess - Chocolate Malt	0.13 kg (5%)	60 %	690

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	7.5 g	60 min	13.2 %
Boil	Simcoe	10 g	15 min	13.2 %
Boil	Simcoe	7.5 g	5 min	13.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Safale S-04	Ale	Dry	11 g	Safale
-------------	-----	-----	------	--------