

American Stout

- Gravity **12.9 BLG**
- ABV ---
- IBU **47**
- SRM **56.4**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **71 C**, Time **10 min**
- Temp **77 C**, Time **1 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **71C**
- Keep mash **1 min** at **77C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (56.6%)	80 %	5
Grain	Viking Munich Malt	1 kg (18.9%)	78 %	18
Grain	Jęczmień palony	0.5 kg (9.4%)	55 %	985
Grain	Briess - Chocolate Malt	0.25 kg (4.7%)	60 %	690
Grain	Weyermann - Carafa II_	0.25 kg (4.7%)	70 %	837
Adjunct	płatki jęczmienne	0.3 kg (5.7%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Colombus	20 g	60 min	15 %
Boil	Simcoe	20 g	15 min	13 %
Whirlpool	Simcoe	30 g	20 min	13 %
Dry Hop	Simcoe	50 g	3 day(s)	13 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	11 g	Safale
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