

American Stout I

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **34**
- SRM **42.9**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **29.6 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **35 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **22.2 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **35 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (67.6%)	80 %	5
Grain	Caramel/Crystal Malt	0.5 kg (6.8%)	72 %	236
Grain	Weyermann - Słód pszeniczny	0.2 kg (2.7%)	82 %	4
Grain	Carafa II	0.3 kg (4.1%)	70 %	812
Grain	Carafa	0.3 kg (4.1%)	70 %	664
Grain	Castle Malting - Jęczmień palony	0.2 kg (2.7%)	55 %	985
Grain	Czekoladowy	0.3 kg (4.1%)	60 %	788
Grain	Płatki owsiane	0.4 kg (5.4%)	85 %	3
Grain	Płatki pszeniczne	0.2 kg (2.7%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	20 g	60 min	9.5 %
Boil	Amarillo	20 g	30 min	9.5 %
Boil	Amarillo	10 g	15 min	9.5 %

Dry Hop	Amarillo	50 g	3 day(s)	9.5 %
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Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis