

4. American Stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **47**
- SRM **40.5**
- Style **American Stout**

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 **13 %/h**
- Boil size **27.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **18.2 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.7 kg (51.9%)	80 %	5
Grain	Strzegom Monachijski typ I	1 kg (19.2%)	79 %	16
Grain	chateau Coffee	0.5 kg (9.6%)	70 %	500
Grain	Roasted Barley	0.45 kg (8.7%)	55 %	591
Grain	Strzegom Karmel 300	0.3 kg (5.8%)	70 %	299
Grain	Strzegom Czekoladowy 1200	0.25 kg (4.8%)	68 %	1202

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	25 g	60 min	11.4 %
Aroma (end of boil)	Simcoe	20 g	15 min	11.4 %
Aroma (end of boil)	Simcoe	15 g	5 min	11.4 %
Dry Hop	Simcoe	20 g	7 day(s)	11.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	Safale