

American Stout

- Gravity **12.4 BLG**
- ABV ---
- IBU **107**
- SRM **30.8**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **17.2 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.2 kg (74.4%)	85 %	7
Grain	Płatki jęczmienne	0.5 kg (11.6%)	85 %	4
Grain	Płatki owsiane	0.2 kg (4.7%)	85 %	3
Grain	Jęczmień palony	0.3 kg (7%)	55 %	1200
Grain	Carafa II	0.1 kg (2.3%)	70 %	812

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	30 g	60 min	7 %
Boil	Mosaic	15 g	55 min	10 %
Boil	Sorachi Ace	15 g	30 min	10 %
Aroma (end of boil)	Equinox	15 g	20 min	13.1 %
Aroma (end of boil)	Mosaic	15 g	20 min	10 %
Aroma (end of boil)	Equinox	15 g	5 min	13.1 %
Aroma (end of boil)	Sorachi Ace	15 g	5 min	10 %
Dry Hop	Equinox	100 g	7 day(s)	13.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	13 g	Safale