

American Stout

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **57**
- SRM **34.6**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.7 liter(s) / kg**
- Mash size **19.7 liter(s)**
- Total mash volume **27 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19.7 liter(s)** of strike water to **69.8C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (68.5%)	85 %	7
Grain	Weyermann - Vienna Malt	1 kg (13.7%)	81 %	8
Grain	Carahell	0.5 kg (6.8%)	77 %	26
Grain	Jęczmień palony	0.5 kg (6.8%)	55 %	1100
Grain	Żytni czekoladowy	0.3 kg (4.1%)	85 %	700

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	30 g	60 min	12.8 %
Boil	Chinook	30 g	10 min	12.8 %
Boil	Equinox	30 g	10 min	12.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	---