

American Stout

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **66**
- SRM **39.3**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **22.1 liter(s)**

Steps

- Temp **64 C**, Time **10 min**
- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **16.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **10 min** at **64C**
- Keep mash **60 min** at **68C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **28.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (75.3%)	80 %	5
Adjunct	Płatki owsiane	0.45 kg (7.5%)	85 %	3
Grain	Strzegom Karmel 600	0.45 kg (7.5%)	68 %	601
Grain	Strzegom Czekoladowy ciemny	0.45 kg (7.5%)	68 %	1200
Grain	Jęczmień palony	0.125 kg (2.1%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	13.2 %
Boil	Cascade	30 g	60 min	6 %
Boil	Cascade	30 g	15 min	6 %
Aroma (end of boil)	Cascade	30 g	5 min	6 %

Yeasts

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