

American Stout

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **48**
- SRM **31.9**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **10 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (66%)	80 %	5
Grain	Słód Caramunich Typ II Weyermann	0.6 kg (11.3%)	73 %	120
Grain	Chocolate Malt (UK)	0.6 kg (11.3%)	73 %	887
Grain	Żytni	0.6 kg (11.3%)	85 %	8

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	60 min	11.5 %
Whirlpool	Centennial	50 g	20 min	10.5 %
Dry Hop	Centennial	150 g	3 day(s)	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Windsor Ale	Ale	Dry	11 g	Danstar
Lallemand - Lalbrew London English-style	Ale	Dry	11 g	Lallemand

Extras

Type	Name	Amount	Use for	Time
Water Agent	CaCl ₂	5 g	Mash	60 min
Water Agent	Lactic Acid	3 g	Mash	60 min
Fining	Whirlflock-T	2.5 g	Boil	10 min