

UStout

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **48**
- SRM **34.8**
- Style **American Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **21.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **11.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (70.4%)	80 %	5
Grain	Monachijski	1 kg (14.1%)	80 %	16
Grain	Brown Malt (British Chocolate)	0.3 kg (4.2%)	70 %	128
Grain	Fawcett - Pale Chocolate	0.4 kg (5.6%)	71 %	600
Grain	Jęczmień palony	0.4 kg (5.6%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	30 g	60 min	15.5 %
Boil	Warrior	20 g	5 min	15.5 %
Aroma (end of boil)	Mosaic	50 g	1 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	10 g	Fermentis