

# American stout

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **47**
- SRM **31.9**
- Style **American Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **29.2 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.8 liter(s)**
- Total mash volume **34.4 liter(s)**

## Steps

- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **25.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **29.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (34.9%)	80 %	5
Grain	Strzegom Pilzneński	2 kg (23.3%)	80 %	4
Grain	Carared	0.5 kg (5.8%)	75 %	39
Grain	Melanoiden Malt	0.5 kg (5.8%)	80 %	39
Grain	Pszeniczny	1 kg (11.6%)	85 %	20
Grain	Strzegom Czekoladowy ciemny	0.2 kg (2.3%)	68 %	1200
Grain	Jęczmień palony	0.4 kg (4.7%)	55 %	985
Grain	Carabohemian	0.2 kg (2.3%)	70 %	200
Grain	Płatki owsiane	0.8 kg (9.3%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	60 min	12 %
Boil	Citra	30 g	15 min	12 %
Boil	Amarillo	15 g	15 min	9.5 %
Boil	Mosaic	15 g	15 min	10 %

Whirlpool	Amarillo	15 g	0 min	9.5 %
Whirlpool	Mosaic	15 g	0 min	10 %
Dry Hop	Mosaic	30 g	5 day(s)	10 %
Dry Hop	Amarillo	30 g	5 day(s)	9.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	200 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips	5 g	Mash	60 min
Fining	Mech irlandzki	5 g	Boil	15 min