

## american stout

---

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **37**
- SRM **28**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **3 %**
- Size with trub loss **62.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **71.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **36.4 liter(s)**
- Total mash volume **48.5 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **75 C**, Time **10 min**
- Temp **50 C**, Time **0 min**

### Mash step by step

- Heat up **36.4 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **0 min** at **50C**
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **75C**
- Sparge using **47.6 liter(s)** of **76C** water or to achieve **71.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4.2 kg (33.8%)	82 %	4
Grain	Strzegom Monachijski typ II	3 kg (24.1%)	79 %	22
Grain	castle malt wheat blanc nature	1 kg (8%)	83 %	5
Grain	Karmelowy Czerwony	1.6 kg (12.9%)	75 %	59
Grain	Płatki owsiane	1.1 kg (8.8%)	85 %	3
Grain	Jęczmień palony	0.75 kg (6%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.47 kg (3.8%)	68 %	1200
Sugar	cukier refermentacja	0.32 kg (2.6%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	70 g	60 min	9.5 %
Boil	Nugget	50 g	10 min	15 %
Dry Hop	Nugget	120 g	5 day(s)	13 %

## Yeasts

Name	Type	Form	Amount	Laboratory
safale s-05	Ale	Slant	290 ml	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	wiórki kokosowe na 20l cicha	200 g	Secondary	4 day(s)
Flavor	kawa cicha kolejne 20l	10 g	Secondary	4 day(s)
Flavor	nugget 20 l cichej	120 g	Secondary	4 day(s)