

## stout

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- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **33**
- SRM **34.3**
- Style **Oatmeal Stout**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.4 liter(s)**
- Total mash volume **13.9 liter(s)**

### Steps

- Temp **65 C**, Time **10 min**
- Temp **67 C**, Time **35 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **10.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **10 min** at **65C**
- Keep mash **35 min** at **67C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **5.8 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Monachijski	0.3 kg (8.6%)	80 %	16
Grain	Viking Pale Ale malt	2 kg (57.5%)	80 %	5
Grain	Strzegom Karmel 30	0.5 kg (14.4%)	75 %	30
Grain	Oats, Flaked	0.228 kg (6.6%)	80 %	2
Grain	Jęczmień palony	0.2 kg (5.8%)	55 %	1100
Grain	Strzegom Czekoladowy 400	0.25 kg (7.2%)	68 %	400

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tomyski	20 g	40 min	2.8 %
Boil	Nugget	20 g	15 min	13 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	9 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	laktoza	150 g	Boil	20 min