

# stout

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **27**
- SRM **22.5**
- Style **Oatmeal Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

## Steps

- Temp **68 C**, Time **10 min**
- Temp **70 C**, Time **60 min**

## Mash step by step

- Heat up **17.7 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **10 min** at **68C**
- Keep mash **60 min** at **70C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2.5 kg (42.4%)	79 %	6
Grain	Mild Malt	1.5 kg (25.4%)	80 %	8
Grain	Strzegom Karmel 300	0.3 kg (5.1%)	70 %	299
Grain	Słód owsiany Fawcett	0.2 kg (3.4%)	61 %	5
Grain	Płatki owsiane	0.4 kg (6.8%)	85 %	3
Grain	Brown Malt (British Chocolate)	0.4 kg (6.8%)	70 %	180
Grain	Strzegom Czekoladowy jasny	0.4 kg (6.8%)	68 %	400
Grain	Fawcett - Pale Chocolate	0.2 kg (3.4%)	71 %	600

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Phoenix	20 g	60 min	8.5 %
Boil	Phoenix	25 g	20 min	8.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

### Extras

Type	Name	Amount	Use for	Time
Spice	Łuska Kakaowa	100 g	Boil	10 min
Spice	łuska kakaowa	50 g	Secondary	7 day(s)
Spice	łuska kakakowa	100 g	Mash	10 min