

## Stout owsiany

---

- Gravity **13.5 BLG**
- ABV ---
- IBU **43**
- SRM **40**
- 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 **80 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.4 liter(s)**

### Steps

- Temp **35 C**, Time **30 min**
- Temp **45 C**, Time **15 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **15.6 liter(s)** of strike water to **37.3C**
- Add grains
- Keep mash **30 min** at **35C**
- Keep mash **15 min** at **45C**
- Keep mash **40 min** at **62C**
- Keep mash **10 min** at **72C**
- Sparge using **20.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (47.6%)	79 %	6
Grain	Strzegom Karmel 150	0.3 kg (4.8%)	75 %	150
Grain	Strzegom Karmel 300	0.3 kg (4.8%)	70 %	299
Grain	Strzegom Karmel 600	0.3 kg (4.8%)	68 %	601
Grain	Strzegom Czekoladowy 1200	0.3 kg (4.8%)	68 %	1202
Adjunct	płatki owsiane	1.5 kg (23.8%)	68 %	---
Grain	Weyermann - Chocolate Wheat	0.3 kg (4.8%)	74 %	788
Grain	Jęczmień palony	0.3 kg (4.8%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	30 g	40 min	4.5 %
Boil	Cascade	30 g	30 min	6 %

Boil	lunga	30 g	20 min	11 %
------	-------	------	--------	------

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale