

## Owsiany Try stout 4

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **31**
- SRM **28**
- Style **Dry 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 **60 %**
- Liquor-to-grist ratio **6 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **19.8 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **17 liter(s)** of strike water to **70.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **-1.5 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (70.8%)	80 %	5
Grain	Viking Munich Malt	0.1 kg (3.5%)	78 %	18
Grain	Viking Biscuit Malt	0.1 kg (3.5%)	79 %	45
Grain	Płatki owsiane	0.4 kg (14.2%)	60 %	3
Grain	Czekoladowy ciemny	0.1 kg (3.5%)	68 %	800
Grain	Barwiący	0.125 kg (4.4%)	68 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	12 g	60 min	11 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	30 ml	Fermentum Mobile
Bez startera				