

Czarna owsianka

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **44**
- SRM **41.4**
- Style **Oatmeal Stout**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (65.6%)	80 %	5
Grain	Viking Malt Karmel 300	0.4 kg (6.6%)	70 %	300
Grain	Jęczmień palony	0.3 kg (4.9%)	55 %	1150
Grain	Strzegom Czekoladowy 1200	0.4 kg (6.6%)	68 %	1202
Grain	Płatki owsiane	1 kg (16.4%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	9.9 %
Boil	Challenger	30 g	30 min	6.1 %