

Czarna owsianka

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **36**
- 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 | East Kent Goldings | 35 g | 60 min | 6.3 % |
| Boil | Challenger | 30 g | 30 min | 6.1 % |