

OWS

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **24**
- SRM **35.9**
- Style **Oatmeal Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.72 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24.6 liter(s)**

Steps

- Temp **68 C**, Time **90 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **76.8C**
- Add grains
- Keep mash **90 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|--------|-----|
| Grain | Castle Pale Ale | 3 kg (45.5%) | 80 % | 8 |
| Grain | Monachijski | 1 kg (15.2%) | 80 % | 16 |
| Grain | Casle Malting Whisky Nature | 1 kg (15.2%) | 85 % | 4 |
| Grain | Czekoladowy | 0.4 kg (6.1%) | 60 % | 788 |
| Grain | Castle Cafe | 0.4 kg (6.1%) | 75.5 % | 480 |
| Grain | Briess - Black Malt | 0.2 kg (3%) | 55 % | 985 |
| Grain | Płatki owsiane | 0.6 kg (9.1%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------------|--------|--------|------------|
| Boil | Kent Goldings | 40 g | 60 min | 5.5 % |
| Aroma (end of boil) | Kent Goldings | 10 g | 15 min | 5.5 % |

Yeasts

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