

## No4

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **22**
- SRM **29.5**
- Style **Oatmeal Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

### Steps

- Temp **68 C**, Time **120 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **19.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **120 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

### Fermentables

| Type  | Name   | Amount         | Yield  | EBC  |
|-------|--|----------------|--------|------|
| Grain | Bruntal Pale Ale                             | 3.5 kg (53%)   | 80 %   | 35   |
| Grain | Monachijski typ II<br>20-25 EBC<br>Weyermann | 1 kg (15.2%)   | 80 %   | 20   |
| Grain | Płatki owsiane                               | 1.2 kg (18.2%) | 85 %   | 3    |
| Grain | Weyermann<br>Caramunich 3                    | 0.2 kg (3%)    | 76 %   | 150  |
| Grain | Carahell                                     | 0.2 kg (3%)    | 77 %   | 26   |
| Grain | Weyermann -<br>Carafa II                     | 0.1 kg (1.5%)  | 70 %   | 837  |
| Grain | Castle Cafe                                  | 0.2 kg (3%)    | 75.5 % | 480  |
| Grain | Fawcett -<br>Pszeniczny<br>Czekoladowy       | 0.2 kg (3%)    | 73 %   | 1001 |

### Hops

| Use for | Name      | Amount | Time   | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil    | Tradition | 40 g   | 60 min | 5.5 %      |

### Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|      |     |     |        |           |
|------|-----|-----|--------|-----------|
| us-4 | Ale | Dry | 11.5 g | fermentis |
|------|-----|-----|--------|-----------|

## Notes

- Po 40 min gotowania + 50 gr Carafa II  
Po 50 min gotowania + 50 gr Jęczmienia palonego  
*Dec 29, 2018, 7:19 PM*