

## 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 20-25 EBC Weyermann	1 kg (15.2%)	80 %	20
Grain	Płatki owsiane	1.2 kg (18.2%)	85 %	3
Grain	Weyermann Caramunich 3	0.2 kg (3%)	76 %	150
Grain	Carahell	0.2 kg (3%)	77 %	26
Grain	Weyermann - Carafa II	0.1 kg (1.5%)	70 %	837
Grain	Castle Cafe	0.2 kg (3%)	75.5 %	480
Grain	Fawcett - Pszeniczny 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
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us-4	Ale	Dry	11.5 g	fermentis
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## Notes

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