

## #51 Smoked Rye Brown Porter

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **33**
- SRM **29.7**
- Style **Brown Porter**

### Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **30 min**
- Evaporation rate **10 %/h**
- Boil size **13.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.7 liter(s)**
- Total mash volume **14.3 liter(s)**

### Steps

- Temp **70 C**, Time **70 min**

### Mash step by step

- Heat up **10.7 liter(s)** of strike water to **78.3C**
- Add grains
- Keep mash **70 min** at **70C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **13.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Rye Malt	0.5 kg (14%)	63 %	10
Grain	Weyermann - Smoked Malt	1 kg (28%)	81 %	6
Grain	Strzegom Monachijski typ I	1 kg (28%)	79 %	16
Grain	Płatki owsiane	0.3 kg (8.4%)	85 %	3
Grain	Biscuit Malt	0.2 kg (5.6%)	79 %	45
Grain	Weyermann Caramunich 3	0.17 kg (4.8%)	76 %	150
Grain	Caraaroma	0.23 kg (6.4%)	78 %	400
Grain	Carafa II	0.17 kg (4.8%)	70 %	1000

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	13.6 g	35 min	10.5 %
Boil	Iunga	7 g	35 min	10 %
Aroma (end of boil)	Fuggles	20 g	5 min	5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Danstar - Nottingham	Ale	Dry	11 g	Danstar
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## Notes

- Korekcja wody wg Brewersfriend London + korekta pH wody do wyśładzania  
Nadspodziewanie wysoka wydajność  
Długie gotowanie (chyba okolicie 2h)  
*Jan 12, 2021, 10:12 PM*