

## #48 Plummy Smoked Porter

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **62**
- SRM **28.8**
- Style **Brown Porter**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

### Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **15.3 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **22.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (78.4%)	81 %	4
Grain	Caramel/Crystal Malt - 120L	0.3 kg (5.9%)	72 %	236
Grain	Strzegom Czekoladowy jasny	0.1 kg (2%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.3 kg (5.9%)	68 %	1200
Grain	Płatki owsiane	0.4 kg (7.8%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	7.4 %
Boil	Marynka	20 g	30 min	7.4 %
Boil	Puławski	30 g	30 min	7.2 %
Boil	Puławski	20 g	10 min	7.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Danstar - Nottingham	Ale	Dry	22 g	Danstar
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### Extras

Type	Name	Amount	Use for	Time
Flavor	Suska macerowana w whisky	250 g	Secondary	5 day(s)