

## PLUMMY SMOKED PORTER 16-5

- Gravity **22 BLG**
- ABV ---
- IBU **37**
- SRM **48**
- Style **Robust Porter**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

### Steps

- Temp **52 C**, Time **20 min**
- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **19.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **40 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.5 kg (68.2%)	80 %	4
Grain	Caraaroma	0.2 kg (3%)	78 %	400
Grain	Peat Smoked Malt	1 kg (15.2%)	74 %	6
Grain	Simpsons - Crystal Dark	0.3 kg (4.5%)	74 %	158
Grain	Strzegom Czekoladowy ciemny	0.3 kg (4.5%)	68 %	1200
Grain	Płatki owsiane	0.3 kg (4.5%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	40 g	60 min	4.5 %
Boil	Fuggles	30 g	30 min	4.5 %
Boil	Fuggles	30 g	15 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Slant	200 ml	Safale
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### Extras

Type	Name	Amount	Use for	Time
Flavor	Płatki dębowe	25 g	Secondary	14 day(s)
Flavor	Śliwki wędzone dymem	300 g	Boil	10 min
Flavor	Śliwki wędzone dymem	300 g	Secondary	4 day(s)