

## 71 Smoked FES

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- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **40**
- SRM **38.8**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**

### Mash step by step

- Heat up **12 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **5.8 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Wędzony Steinbach	2 kg (50%)	80 %	5
Grain	Viking Pale Ale malt	0.8 kg (20%)	80 %	5
Grain	Płatki owsiane	0.6 kg (15%)	85 %	3
Grain	Fawcett - Pszeniczny Czekoladowy	0.4 kg (10%)	73 %	1001
Grain	Crystal II 200	0.2 kg (5%)	71 %	200

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	22 g	60 min	11 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	150 ml	Fermentum Mobile