

Peated FES

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **50**
- SRM **38.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **25 %/h**
- Boil size **15.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **20.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **25 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.4 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **25 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **2.8 liter(s)** of **76C** water or to achieve **15.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Wędzony torfem	1.5 kg (36.6%)	81 %	7
Grain	Viking Pale Ale malt	1.5 kg (36.6%)	80 %	5
Grain	Smooth chocolate	0.1 kg (2.4%)	60 %	494
Grain	Jęczmień palony	0.1 kg (2.4%)	55 %	1150
Grain	Płatki owsiane	0.4 kg (9.8%)	60 %	3
Grain	Brown Malt (British Chocolate)	0.1 kg (2.4%)	60 %	500
Grain	Coffee light	0.15 kg (3.7%)	60 %	250
Grain	Special B Malt	0.15 kg (3.7%)	65.2 %	315
Grain	Carafa II	0.1 kg (2.4%)	70 %	1150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	25 g	45 min	12.2 %