

## FES a'la doris 2.0

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- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **37**
- SRM **39.4**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss --- %
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.5 liter(s)**
- Total mash volume **31.4 liter(s)**

### Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **23.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **14.8 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg (76.4%)	80 %	5
Grain	Strzegom Monachijski typ I	0.6 kg (7.6%)	79 %	16
Grain	Płatki żytnie	0.4 kg (5.1%)	85 %	3
Grain	Strzegom Czekoladowy ciemny	0.5 kg (6.4%)	68 %	1200
Grain	Jęczmień palony	0.35 kg (4.5%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Izabella	50 g	60 min	6.1 %
Boil	Izabella	50 g	15 min	6.1 %