

FES ala Dori

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **39**
- SRM **24.8**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.1 liter(s)**
- Total mash volume **24.2 liter(s)**

Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **18.1 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (82.6%)	80 %	3.2
Grain	Caraaroma	0.35 kg (5.8%)	78 %	400
Grain	Weyermann - Dehusked Carafa I	0.1 kg (1.7%)	70 %	1000
Grain	Jęczmień niesłodowany	0.4 kg (6.6%)	75 %	2
Grain	Jęczmień palony	0.2 kg (3.3%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	40 g	50 min	8.8 %
Boil	Lublin (Lubelski)	40 g	10 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	---