

## #10: FES

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **42**
- SRM **43.2**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **14.5 liter(s)**

### Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **15.7 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **30 min**

### Mash step by step

- Heat up **12 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **30 min** at **72C**
- Sparge using **6.2 liter(s)** of **76C** water or to achieve **14.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.3 kg (63%)	81 %	4
Grain	Barley, Flaked	0.25 kg (6.8%)	70 %	4
Grain	Caraaroma	0.25 kg (6.8%)	78 %	400
Grain	Abbey Malt Weyermann	0.25 kg (6.8%)	75 %	45
Grain	Jęczmień palony	0.2 kg (5.5%)	55 %	985
Grain	Carafa III	0.2 kg (5.5%)	70 %	1034
Grain	Płatki owsiane	0.2 kg (5.5%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	8.8 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	80 ml	Safale

### Notes

- Pomysł na FES'a z receptury Alderaan - do uwarzenia w przyszłym tygodniu...Gestwa po Oatmealu zjadła do 5 Blg, 20 butelek, na dzis fest palone, ciekawe jak sie ulozy...slody ciemne od poczatku zacierania

*Nov 1, 2017, 10:50 AM*