

## 11. Citrus FES

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- Gravity **19.1 BLG**
- ABV **8.3 %**
- IBU **53**
- SRM **65.8**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **4 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **12.5 %/h**
- Boil size **25.2 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.4 liter(s)**
- Total mash volume **33.8 liter(s)**

### Steps

- Temp **65 C**, Time **75 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **25.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **75 min** at **65C**
- Keep mash **0 min** at **78C**
- Sparge using **8.3 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.7 kg (55.6%)	79 %	6
Grain	Pszeniczny	0.8 kg (9.5%)	81 %	4
Grain	Strzegom Karmel 300	0.16 kg (1.9%)	70 %	299
Grain	Strzegom Czekoladowy 1200	0.75 kg (8.9%)	68 %	1202
Grain	Jęczmień palony	0.8 kg (9.5%)	55 %	985
Grain	Viking Malt Wędzony Czereśnią	0.4 kg (4.7%)	82 %	10
Grain	Płatki owsiane	0.85 kg (10%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	13.2 %
Aroma (end of boil)	Simcoe	25 g	10 min	13.2 %
Aroma (end of boil)	Comet	20 g	10 min	12.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	20 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	zest cytusowy	1010101 g	Primary	5 day(s)