

## 2# Vanilla FES

- Gravity **19.3 BLG**
- ABV ---
- IBU **32**
- SRM **40**
- 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 **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **29.2 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **78 C**, Time **10 min**
- Temp **70 C**, Time **30 min**

### Mash step by step

- Heat up **21.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **70C**
- Keep mash **10 min** at **78C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (68.5%)	79 %	6
Grain	Carafa III	0.3 kg (4.1%)	70 %	1034
Grain	Strzegom Czekoladowy ciemny	0.2 kg (2.7%)	68 %	1200
Grain	Strzegom pszenica prażona	0.3 kg (4.1%)	70 %	1000
Grain	Słód karmelowy 600 Strzegom	1 kg (13.7%)	--- %	---
Grain	Pszeniczny	0.5 kg (6.8%)	85 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Progress	50 g	60 min	6.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	30 ml	Fermentum Mobile

### Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Spice	WANILIA	0 g	Boil	10 min
Spice	WANILIA	15 g	Secondary	---
Flavor	kawa	0 g	Secondary	---