

# Vanilla FES

- Gravity **16.4 BLG**
- ABV ---
- IBU **36**
- SRM **28.3**
- 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 **18.2 liter(s)**
- Total mash volume **24.2 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18.2 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (82.6%)	81 %	4
Grain	Caraaroma	0.3 kg (5%)	78 %	400
Grain	Weyermann - Carafa I	0.15 kg (2.5%)	70 %	800
Grain	Płatki owsiane (jęczmienne)	0.4 kg (6.6%)	85 %	3
Grain	Jęczmień palony	0.2 kg (3.3%)	55 %	1100

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	50 min	10 %
Aroma (end of boil)	Lubelski	40 g	10 min	4 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Herb	Wanilia	30 g	Secondary	5 day(s)