

# FES z kawą

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **40**
- SRM **26**
- 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 **4 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **0 min** at **76C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	1 kg (16.7%)	85 %	7
Grain	Caraaroma	0.333 kg (5.6%)	78 %	400
Grain	Weyermann - Carafa II	0.166 kg (2.8%)	70 %	837
Grain	Jęczmień palony	0.166 kg (2.8%)	55 %	985
Grain	Strzegom Monachijski typ I	0.333 kg (5.6%)	79 %	16
Grain	Weyermann - Pilsner Malt	1.8 kg (30%)	81 %	5
Grain	Viking Pilsner malt	2.2 kg (36.7%)	82 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Falconer's Flight	30 g	60 min	10.4 %
First Wort	Marynka	5 g	60 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	15 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	Kawa	50 g	Secondary	5 day(s)