

# Coffee FES

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **53**
- SRM **34**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **5 %**
- Size with trub loss **44 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.6 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **37.5 liter(s)**
- Total mash volume **50 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **37.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **25.6 liter(s)** of **76C** water or to achieve **50.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	10 kg (80%)	80 %	5
Grain	Aromatic Malt	1 kg (8%)	78 %	51
Grain	Jęczmień palony	1 kg (8%)	55 %	985
Grain	Fawcett - Pale Chocolate	0.5 kg (4%)	71 %	600

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	80 g	60 min	10 %
Aroma (end of boil)	Marynka	50 g	15 min	10 %
Aroma (end of boil)	Marynka	50 g	5 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Vermont Ale	Ale	Slant	500 ml	Yeast Bay

## Extras

Type	Name	Amount	Use for	Time
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Flavor	kawa	100 g	Boil	1 min
Flavor	skórka pomarańczy	20 g	Boil	1 min