

# FES

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **45**
- SRM **36.5**
- Style **Foreign Extra Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.1 liter(s)**
- Total mash volume **30.8 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	4 kg (44.9%)	83 %	6
Grain	Płatki owsiane	1 kg (11.2%)	85 %	3
Grain	Briess - Midnight Wheat Malt	0.5 kg (5.6%)	55 %	1084
Grain	Roasted Barley	0.5 kg (5.6%)	55 %	591
Grain	Caramel/Crystal Malt - 30L	0.5 kg (5.6%)	75 %	59
Liquid Extract	WES ekstrakt słodowy jasny	1.2 kg (13.5%)	80 %	---
Grain	Caramel/Crystal Malt - 60L	0.5 kg (5.6%)	74 %	118
Grain	Bestmalz Red X	0.5 kg (5.6%)	79 %	30
Grain	Pszeniczny	0.2 kg (2.2%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	50 g	50 min	13.5 %

## Yeasts

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