

## FEZ

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **46**
- SRM **21.7**
- Style **Foreign Extra Stout**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **29.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.5 liter(s)**
- Total mash volume **28.6 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (55.9%)	80 %	5
Grain	Płatki owsiane	0.8 kg (11.2%)	85 %	3
Grain	Pszeniczny	1.2 kg (16.8%)	85 %	4
Grain	Caramel Sweet	0.25 kg (3.5%)	75 %	50
Grain	Żytni palony	0.15 kg (2.1%)	70 %	450
Grain	Strzegom Czekoladowy 400	0.15 kg (2.1%)	68 %	400
Grain	Strzegom Czekoladowy 1200	0.2 kg (2.8%)	68 %	1202
Grain	kawowy	0.25 kg (3.5%)	70 %	---
Grain	czekoladowy pszeniczny	0.15 kg (2.1%)	70 %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	35 g	60 min	11 %
Boil	East Kent Goldings	30 g	20 min	5.1 %
Boil	Hallertau	20 g	20 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	---

### Extras

Type	Name	Amount	Use for	Time
Flavor	ostra papryczka	10 g	Boil	0 min
Flavor	tonka	5 g	Secondary	7 day(s)

Flavor	kawa	100 g	Secondary	7 day(s)
Flavor	kokos	100 g	Secondary	7 day(s)