

FES

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **33**
- SRM **36.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.7 liter(s)**
- Total mash volume **31.6 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	6 kg (75.9%)	85 %	7
Grain	Carafa	0.3 kg (3.8%)	70 %	664
Grain	Weyermann - Rye Malt	1 kg (12.7%)	85 %	7
Grain	Jęczmień palony	0.3 kg (3.8%)	55 %	985
Grain	Strzegom pszenica prażona	0.3 kg (3.8%)	70 %	1000

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	50 g	60 min	4.5 %
Boil	Fuggles	50 g	30 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	30 ml	Fermentum Mobile