

FES

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU **65**
- SRM **40.9**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **12.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (71.4%)	81 %	4
Grain	Caraaroma	0.25 kg (6%)	78 %	400
Grain	Weyermann - Dehusked Carafa III	0.25 kg (6%)	70 %	1024
Grain	Jęczmień palony	0.2 kg (4.8%)	55 %	985
Sugar	Brown Sugar, Light	0.2 kg (4.8%)	100 %	16
Grain	Płatki owsiane	0.3 kg (7.1%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	30 g	60 min	13.3 %
Aroma (end of boil)	East Kent Goldings	15 g	15 min	5.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Liquid	350 ml	Fermentum Mobile