

FES

- Gravity **18.4 BLG**
- ABV **8 %**
- IBU **41**
- SRM **53**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24.6 liter(s)**
- Total mash volume **32.8 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (61%)	79 %	6
Grain	Płatki owsiane	1.8 kg (22%)	65 %	3
Grain	Czekoladowy	0.5 kg (6.1%)	60 %	800
Grain	Carafa III	0.4 kg (4.9%)	70 %	1000
Grain	Jęczmień palony	0.5 kg (6.1%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	30 g	60 min	15.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Other	Tonka	10 g	Secondary	---