

Fez

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **38**
- SRM **35.9**
- 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 **60 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **16 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **68 C**, Time **90 min**

Mash step by step

- Heat up **16 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **17.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (50%)	80 %	4
Grain	Strzegom Monachijski typ I	2 kg (25%)	79 %	16
Grain	Weyermann - Carawheat	0.5 kg (6.3%)	77 %	97
Grain	Jęczmień palony	0.5 kg (6.3%)	55 %	985
Grain	Jęczmień niesłodowany	0.5 kg (6.3%)	75 %	2
Grain	Special B Malt	0.5 kg (6.3%)	65.2 %	315

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	30 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis