

FES wg Doroty Chrapek

- Gravity **98.3 BLG**
- ABV **164.6 %**
- IBU **6**
- SRM **120.7**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **2 liter(s)**
- Trub loss **5 %**
- Size with trub loss **2.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **20 %/h**
- Boil size **2.8 liter(s)**

Mash information

- Mash efficiency **64 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	4.5 kg (80.4%)	81 %	4
Grain	Caraaroma	0.3 kg (5.4%)	78 %	400
Grain	Carafa II	0.1 kg (1.8%)	70 %	812
Grain	Jęczmień niesłodowany	0.5 kg (8.9%)	75 %	2
Grain	Jęczmień palony	0.2 kg (3.6%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	30 g	10 min	4 %