

fes MPPD

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **47**
- SRM **38.2**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (83.3%)	80 %	5
Grain	Słód owsiany Fawcett	0.2 kg (5.6%)	61 %	5
Grain	Jęczmień palony	0.4 kg (11.1%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	lunga	20 g	60 min	11 %
Boil	Marynka	10 g	5 min	10 %