

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **53**
- SRM **44.1**
- Style **American Stout**

### Batch size

- Expected quantity of finished beer **9.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **10.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **14.1 liter(s)**

### Mash information

- Mash efficiency **75 %**
- 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	2.6 kg (72.2%)	80 %	5
Grain	Płatki owsiane	0.4 kg (11.1%)	71 %	3
Grain	Jęczmień palony	0.2 kg (5.6%)	55 %	985
Grain	Carafa III special	0.2 kg (5.6%)	70 %	1500
Grain	Fawcett - Crystal	0.2 kg (5.6%)	70 %	160

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	20 g	60 min	11.7 %
Aroma (end of boil)	Simcoe	25 g	5 min	11.7 %

### Notes

- hopstant 78c simcoe 25g, centennial 25g 25 min  
*Oct 21, 2019, 11:50 PM*