

bitter113

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **40**
- SRM **11.8**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.3 liter(s)**
- Total mash volume **17.7 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Maris Otter Crisp	4 kg (90.5%)	83 %	6
Grain	Caramel/Crystal Malt - 80L	0.2 kg (4.5%)	74 %	170
Grain	Caramel/Crystal Malt - 120L	0.2 kg (4.5%)	72 %	270
Grain	Jęczmień palony	0.02 kg (0.5%)	55 %	1100

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	15 g	60 min	12.8 %
Boil	Simcoe	15 g	20 min	12.8 %
Whirlpool	East Kent Goldings	25 g	5 min	4.5 %