

# Bitter

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **37**
- SRM **12.2**

## 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.1 liter(s)**
- Total mash volume **9.4 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	2 kg (85.1%)	81 %	6
Grain	Caramel/Crystal Malt - 120L	0.25 kg (10.6%)	72 %	236
Grain	Biscuit Malt	0.1 kg (4.3%)	79 %	45

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM11 Wichrowe Wzgórza	Ale	Liquid	30 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Water Agent	gips piwowarski	2 g	Mash	---
Water Agent	sól kuchenna	1 g	Mash	---