

# Bitter

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **42**
- SRM **13.3**
- Style **Special/Best/Premium Bitter**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	4 kg (80%)	81 %	6
Grain	Fawcett - Dark Crystal	0.5 kg (10%)	71 %	300
Grain	Karmelowy Jasny 30EBC	0.5 kg (10%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	20 g	60 min	4.5 %
Boil	Challenger	20 g	60 min	7 %
Boil	Fuggles	20 g	20 min	4.5 %
Boil	East Kent Goldings	20 g	20 min	5.1 %
Boil	Fuggles	30 g	5 min	4.5 %
Boil	East Kent Goldings	30 g	5 min	5.1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - London ESB Ale	Ale	Liquid	1000 ml	Wyeast Labs