

## to jest biter

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **23**
- SRM **7.3**
- Style **Standard/Ordinary Bitter**

### Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **10 %**
- Size with trub loss **41.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **50.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **26.6 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	5 kg (61.3%)	80.5 %	6
Liquid Extract	Maris Otter Pale Ale Malt	1.5 kg (18.4%)	80 %	10
Grain	Abbey Castle	1 kg (12.3%)	75 %	50
Grain	Caramel/Crystal Malt - 30L	0.225 kg (2.8%)	75 %	59
Grain	Caramunich® typ I	0.18 kg (2.2%)	75 %	80
Grain	Biscuit Malt	0.25 kg (3.1%)	79 %	50

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	68 g	60 min	4.5 %
Boil	East Kent Goldings	28 g	20 min	4.5 %
Aroma (end of boil)	East Kent Goldings	28 g	1 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
WLP007 - Dry English Ale Yeast	Ale	Liquid	11 ml	White Labs

### Notes

- 16l water set up for mashing  
pale malt, flaked oats and cookie mashed for 70 mins in 65-67 Celsius  
mashed-out in 77C, sparged with 11l of water  
14 BRIX = 13.4 blg  
after fermentation before correction: 6.7 BRIX = 6.1 blg (on refractometer)  
Final Gravity = 2.7 blg  
carbonation: 1.9  
alc vol ~5,8  
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