

## Bitter // XNKF876

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- Gravity **11.4 BLG**
- ABV ---
- IBU **32**
- SRM **7.3**
- Style **Special/Best/Premium Bitter**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.8 liter(s)**
- Total mash volume **17 liter(s)**

### Steps

- Temp **66 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **12.8 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **21.9 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	4 kg (94.1%)	80 %	8
Grain	Fawcett - Crystal	0.25 kg (5.9%)	70 %	160

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	35 g	75 min	7 %
Aroma (end of boil)	Challenger	15 g	10 min	7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM10 O czym szumią wierzby	Ale	Liquid	800 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Fining	Irish Moss	5 g	Boil	15 min