

## Bitter #34

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- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **28**
- SRM **12.1**
- Style **Standard/Ordinary Bitter**

### Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **38 liter(s)**

### Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **26 liter(s)**

### Steps

- Temp **70 C**, Time **60 min**
- Temp **76 C**, Time **2 min**

### Mash step by step

- Heat up **20.8 liter(s)** of strike water to **76.3C**
- Add grains
- Keep mash **60 min** at **70C**
- Keep mash **2 min** at **76C**
- Sparge using **22.4 liter(s)** of **76C** water or to achieve **38 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale Malt	4 kg (76.9%)	75 %	5
Grain	Strzegom Monachijski typ II	0.5 kg (9.6%)	79 %	22
Grain	Crystal 150	0.5 kg (9.6%)	72 %	150
Grain	Strzegom Karmel 600	0.2 kg (3.8%)	68 %	601

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Saaz (Czech Republic)	30 g	10 min	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - London ESB Ale	Ale	Slant	2000 ml	Danstar