

## #61 Ordinary Bitter

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **30**
- SRM **7.8**
- Style **Standard/Ordinary Bitter**

### Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **4 %**
- Size with trub loss **25 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **22.5 liter(s)**

### Steps

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

### Mash step by step

- Heat up **18 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **90 min** at **66C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Malteurop Pale Ale	2 kg (44.4%)	82 %	6
Grain	Malteurop Wiedeński	2 kg (44.4%)	79 %	10
Grain	Strzegom Karmel 150	0.3 kg (6.7%)	75 %	150
Grain	Karmelowy Czerwony	0.2 kg (4.4%)	75 %	59

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Boil	Marynka	15 g	30 min	10 %
Boil	Marynka	20 g	10 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M07 British Ale	Ale	Dry	10 g	Mangrove Jack's