

## #061 Ordinary Bitter

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **26**
- SRM **7.9**
- Style **Special/Best/Premium Bitter**

### Batch size

- Expected quantity of finished beer **18.5 liter(s)**
- Trub loss **10 %**
- Size with trub loss **21.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.1 liter(s)**

### Mash information

- Mash efficiency **86 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **16.4 liter(s)**
- Total mash volume **20.5 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **16.4 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **28.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.7 kg (90.2%)	80 %	5
Grain	Fawcett - Crystal	0.4 kg (9.8%)	70 %	160

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Kazbek	15 g	60 min	6.7 %
Boil	Tettnang	25 g	10 min	3.7 %
Boil	Kazbek	30 g	10 min	6.7 %
Aroma (end of boil)	Kazbek	20 g	5 min	6.7 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM11 Wichrowe Wzgórza	Ale	Slant	500 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Fining	whirfloc t	1.25 g	Boil	10 min

Other	pożywka dla drożdży Wyeast	3 g	Boil	10 min
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