

## Bitter Lemon V2

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- Gravity **15.2 BLG**
- ABV ---
- IBU **90**
- SRM **15.2**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **27.9 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

### Steps

- Temp **58 C**, Time **5 min**
- Temp **67 C**, Time **80 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **19.2 liter(s)** of strike water to **64.3C**
- Add grains
- Keep mash **5 min** at **58C**
- Keep mash **80 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **27.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3 kg (46.9%)	80 %	7
Grain	Briess - Munich Malt 10L	2 kg (31.3%)	77 %	20
Grain	Briess - Carapils Malt	0.2 kg (3.1%)	74 %	3
Grain	Biscuit Malt	1 kg (15.6%)	79 %	45
Grain	Briess - Caracystal Wheat Malt	0.2 kg (3.1%)	78 %	108

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	60 g	60 min	12 %
Boil	Chinook	30 g	10 min	13 %
Dry Hop	Citra	30 g	7 day(s)	12 %
Dry Hop	Mandarina Bavaria	30 g	7 day(s)	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	fermentis

## Extras

Type	Name	Amount	Use for	Time
Water Agent	phosphoric acid	2 g	Mash	90 min
Other	irish moss	5 g	Boil	10 min
Flavor	lemon peel	15 g	Secondary	7 day(s)
Flavor	lemon peel	10 g	Boil	10 min