

## Barley PPM

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- Gravity **29.1 BLG**
- ABV **14.3 %**
- IBU **92**
- SRM **10.1**
- Style **American Barleywine**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **31.5 liter(s)**
- Total mash volume **42 liter(s)**

### Steps

- Temp **65 C**, Time **70 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **31.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **6.5 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Vienna Malt	3 kg (26.1%)	80 %	5
Grain	Maris Otter Crisp	3 kg (26.1%)	83 %	6
Grain	Briess - Pale Ale Malt	3 kg (26.1%)	80 %	7
Grain	Platki owsiane	1 kg (8.7%)	85 %	3
Grain	Caramel/Crystal Malt - 40L	0.5 kg (4.3%)	74 %	79
Sugar	Brown Sugar, Light	1 kg (8.7%)	100 %	16

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Chinook	100 g	90 min	13 %
Aroma (end of boil)	Citra	100 g	5 min	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	20 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Flavor	kostki bourbon	30 g	Secondary	14 day(s)