

# MicroIPA

- Gravity **7.8 BLG**
- ABV **3 %**
- IBU **38**
- SRM **4.9**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **5 liter(s) / kg**
- Mash size **15.1 liter(s)**
- Total mash volume **18.1 liter(s)**

## Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **15.1 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **13.2 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	2 kg (61.1%)	85 %	4
Grain	Płatki owsiane	1 kg (30.5%)	60 %	3
Adjunct	Rice Hulls	0.25 kg (7.6%)	1 %	0
Grain	Carafa III special	0.025 kg (0.8%)	70 %	1034

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	30 min	10 %
Whirlpool	Citra	20 g	60 min	6 %
Whirlpool	Mosaic	20 g	60 min	5 %
Whirlpool	Cascade	20 g	60 min	3 %
Dry Hop	Citra	50 g	3 day(s)	12 %
Dry Hop	Mosaic	50 g	3 day(s)	10 %
Dry Hop	Cascade	50 g	3 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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US-05	Ale	Dry	11 g	---
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### Extras

Type	Name	Amount	Use for	Time
Fining	whirlflock	2.5 g	Boil	10 min
Spice	skórka pomarańczy	30 g	Boil	5 min
Spice	skórka pomarańczy	30 g	Primary	6 day(s)