

# Mango - Czarna Porzeczka IPA

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **16**
- SRM **3.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **27 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.3 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **72.8 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **20 min** at **72.8C**
- Keep mash **10 min** at **78C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **27 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3.5 kg (77.8%)	82 %	4
Grain	Płatki owsiane	1 kg (22.2%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Dry Hop	Amarillo	50 g	3 day(s)	9.5 %
Boil	Lublin (Lubelski)	50 g	30 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Liquid	1000 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Flavor	mango	1000 g	Primary	5 day(s)
Flavor	porzeczka czarna	400 g	Primary	5 day(s)