

# Mango IPA Warka #1

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **25**
- SRM **3.9**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **29.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.7 liter(s)**
- Total mash volume **27.9 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **21.7 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński Viking Male	3 kg (48.4%)	80 %	4
Grain	Pszeniczny Viking Male	1 kg (16.1%)	85 %	4
Grain	Płatki pszeniczne	0.5 kg (8.1%)	60 %	3
Grain	Płatki owsiane	0.7 kg (11.3%)	60 %	3
Grain	Viking Pale Ale malt	1 kg (16.1%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	22 g	60 min	12 %
Aroma (end of boil)	Sabro	30 g	0 min	15 %
Aroma (end of boil)	Vic Secret	25 g	0 min	16.3 %
Dry Hop	Sabro	20 g	7 day(s)	15 %
Dry Hop	Citra	20 g	7 day(s)	12 %
Dry Hop	Citra	10 g	3 day(s)	12 %
Dry Hop	Sabro	15 g	3 day(s)	15 %
Dry Hop	Vic Secret	20 g	3 day(s)	16.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM55 Zielone Wzgórze	Ale	Slant	115 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Flavor	Mango	1200 g	Secondary	7 day(s)
Other	Laktoza	1000 g	Boil	45 min