

# mango

- Gravity **15.2 BLG**
- ABV ---
- IBU **19**
- SRM **4**
- Style **American IPA**

## 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **15.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **30 min** at **72C**
- Sparge using **14.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (60.3%)	80 %	5
Grain	Viking Wheat Malt	1 kg (17.2%)	83 %	5
Grain	Płatki owsiane	0.5 kg (8.6%)	85 %	3
Sugar	Milk Sugar (Lactose)	0.6 kg (10.3%)	76.1 %	0
Grain	Żytni	0.2 kg (3.4%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	10 g	60 min	15.5 %
Aroma (end of boil)	Mosaic	30 g	1 min	12.3 %
Boil	Cascade	20 g	5 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM54 Gorączka kalifornijska	Ale	Liquid	20 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
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Spice	Kolendra - do kuchni	17 g	Boil	10 min
Flavor	Pulpa mango	1700 g	Secondary	7 day(s)