

# Mango Apa 2021

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **34**
- SRM **5.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **5 %**
- Size with trub loss **41.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **47.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.5 liter(s)**
- Total mash volume **38 liter(s)**

## Steps

- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **75 C**, Time **2 min**

## Mash step by step

- Heat up **28.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **2 min** at **75C**
- Sparge using **28.6 liter(s)** of **76C** water or to achieve **47.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	6 kg (63.2%)	80 %	5
Grain	Pszeniczny	2 kg (21.1%)	85 %	4
Grain	Płatki owsiane	1 kg (10.5%)	60 %	3
Grain	Karmelowy Czerwony	0.5 kg (5.3%)	75 %	59

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Amarillo	40 g	60 min	9.5 %
Aroma (end of boil)	Amarillo	60 g	10 min	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Other	Pulpa Mango	2000 g	Primary	12 day(s)

Other	Laktoza	1000 g	Boil	10 min
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