

# Miało być Mango Milkshake

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **69**
- SRM **4.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (57.1%)	80 %	5
Grain	Viking Wheat Malt	1 kg (28.6%)	83 %	5
Sugar	Milk Sugar (Lactose)	0.5 kg (14.3%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	25 g	60 min	12.5 %
Boil	Amarillo	5 g	20 min	9.5 %
Boil	Mosaic	5 g	20 min	10 %
Boil	Amarillo	5 g	10 min	9.5 %
Boil	Mosaic	5 g	10 min	10 %
Boil	Amarillo	10 g	5 min	9.5 %
Dry Hop	Mosaic	40 g	5 day(s)	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis