

# Milkshake Mango IPA 1.5kg mango i laktoza Australia/New Zeland

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **11**
- SRM **4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **37 liter(s)**
- Trub loss **5 %**
- Size with trub loss **38.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **46.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **29.4 liter(s)**
- Total mash volume **39.2 liter(s)**

## Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **29.4 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **27.2 liter(s)** of **76C** water or to achieve **46.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (51%)	80 %	5
Grain	Płatki owsiane	0.5 kg (5.1%)	85 %	3
Grain	Płatki pszeniczne	1.5 kg (15.3%)	85 %	3
Grain	Pilznieński	2.8 kg (28.6%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Enigma (AUS)	20 g	10 min	16.3 %
Aroma (end of boil)	Waimea	100 g	1 min	15.3 %
Dry Hop	Enigma (AUS)	80 g	7 day(s)	16.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
m66	Ale	Dry	31.5 g	mangrove jack

## Extras

Type	Name	Amount	Use for	Time
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Flavor	Laktoza	500 g	Boil	1 min
Flavor	Mango	2400 g	Primary	2 day(s)