

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

- Gravity **13.6 BLG**
- ABV ---
- 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 | Pilzneński           | 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 |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |         |        |         |          |
|--------|---------|--------|---------|----------|
| Flavor | Laktoza | 500 g  | Boil    | 1 min    |
| Flavor | Mango   | 2400 g | Primary | 2 day(s) |