

# Milkshake IPA z mango Homebrewing

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **6**
- SRM **4.2**
- 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

## Steps

- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **16.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **14.1 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 | 4 kg (65.6%)   | 80 %   | 5   |
| Grain | Płatki owsiane       | 0.8 kg (13.1%) | 85 %   | 3   |
| Grain | Płatki pszeniczne    | 0.8 kg (13.1%) | 85 %   | 3   |
| Sugar | Milk Sugar (Lactose) | 0.5 kg (8.2%)  | 76.1 % | 0   |

## Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | Mosaic  | 10 g   | 10 min   | 10 %       |
| Aroma (end of boil) | Equinox | 50 g   | 1 min    | 13.1 %     |
| Dry Hop             | Mosaic  | 50 g   | 3 day(s) | 10 %       |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale  | Dry  | 11.5 g | Fermentis  |

## Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |               |        |         |           |
|--------|---------------|--------|---------|-----------|
| Flavor | Pulpa z mango | 1000 g | Primary | 11 day(s) |
|--------|---------------|--------|---------|-----------|