

# Milkshake Mango IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **11**
- SRM **4.8**
- 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 **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **27.3 liter(s)**

## Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **20.8 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 4.5 kg (69.2%) | 81 %  | 5   |
| Grain | Castle Malting owsiany   | 1 kg (15.4%)   | 85 %  | 5   |
| Grain | Płatki owsiane           | 0.5 kg (7.7%)  | 85 %  | 3   |
| Grain | płatki jęczmienne        | 0.5 kg (7.7%)  | 60 %  | 4   |

## Hops

| Use for   | Name    | Amount | Time      | Alpha acid |
|-----------|---------|--------|-----------|------------|
| Whirlpool | Equinox | 50 g   | 10 min    | 13.1 %     |
| Dry Hop   | Mosaic  | 50 g   | 18 day(s) | 10 %       |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 500 ml | Fermentis  |

## Extras

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

|        |                   |        |         |           |
|--------|-------------------|--------|---------|-----------|
| Flavor | Mango             | 1500 g | Primary | 18 day(s) |
| Flavor | Laktoza           | 500 g  | Boil    | 10 min    |
| Flavor | zest z pomarańczy | 200 g  | Primary | 18 day(s) |