

# Milkshake IPA Marakuja Mango

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **29**
- SRM **3.5**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **22.2 liter(s)**
- Total mash volume **27.8 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **22.2 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **13.4 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

## Fermentables

| Type  | Name           | Amount          | Yield | EBC |
|-------|----------------|-----------------|-------|-----|
| Grain | Pilznieński    | 4 kg (72.1%)    | 81 %  | 4   |
| Grain | Pszeniczny     | 1.15 kg (20.7%) | 85 %  | 4   |
| Grain | Płatki owsiane | 0.4 kg (7.2%)   | 85 %  | 3   |

## Hops

| Use for   | Name    | Amount | Time     | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil      | Marynka | 15 g   | 60 min   | 11 %       |
| Boil      | Motueka | 40 g   | 10 min   | 7 %        |
| Whirlpool | Motueka | 20 g   | 20 min   | 7 %        |
| Dry Hop   | Motueka | 40 g   | 3 day(s) | 7 %        |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11 g   | Safale     |

## Extras

| Type   | Name        | Amount | Use for | Time     |
|--------|-------------|--------|---------|----------|
| Flavor | laktoza     | 500 g  | Boil    | 10 min   |
| Flavor | pulpa mango | 800 g  | Primary | 2 day(s) |

|        |                |       |         |          |
|--------|----------------|-------|---------|----------|
| Flavor | pulpa marakuja | 800 g | Primary | 2 day(s) |
|--------|----------------|-------|---------|----------|