

# Milkshake Mango

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **12**
- SRM **4.2**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **72C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield  | EBC |
|-------|----------------------|---------------|--------|-----|
| Grain | Viking Pale Ale malt | 5 kg (66.7%)  | 80 %   | 5   |
| Grain | Płatki pszeniczne    | 1 kg (13.3%)  | 60 %   | 3   |
| Grain | Płatki owsiane       | 1 kg (13.3%)  | 60 %   | 3   |
| Sugar | Milk Sugar (Lactose) | 0.5 kg (6.7%) | 76.1 % | 0   |

## Hops

| Use for             | Name            | Amount | Time     | Alpha acid |
|---------------------|-----------------|--------|----------|------------|
| Boil                | Mosaic          | 15 g   | 15 min   | 11.9 %     |
| Boil                | Zula            | 10 g   | 15 min   | 10.6 %     |
| Aroma (end of boil) | Zula            | 20 g   | 0 min    | 10.6 %     |
| Aroma (end of boil) | Hallertau Blanc | 25 g   | 0 min    | 9.8 %      |
| Dry Hop             | Mosaic          | 45 g   | 3 day(s) | 11.9 %     |
| Dry Hop             | Hallertau Blanc | 25 g   | 3 day(s) | 9.8 %      |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| Us-05 | Ale  | Dry  | 11 g   | Fermentis  |

## Extras

| Type   | Name        | Amount | Use for | Time     |
|--------|-------------|--------|---------|----------|
| Flavor | Pulpa mango | 1000 g | Primary | 3 day(s) |