

# Milkshake Mango IPA

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **43**
- 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 **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **14.3 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 (72.7%)  | 80 %  | 5   |
| Grain | Strzegom Pilzneński  | 0.5 kg (9.1%) | 80 %  | 4   |
| Grain | Płatki owsiane       | 0.5 kg (9.1%) | 85 %  | 3   |
| Grain | Pszeniczny           | 0.5 kg (9.1%) | 85 %  | 4   |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 25 g   | 60 min   | 15.5 %     |
| Aroma (end of boil) | Mosaic                 | 20 g   | 5 min    | 10 %       |
| Dry Hop             | Mosaic                 | 80 g   | 3 day(s) | 10 %       |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | Fermentis  |

## Extras

| Type        | Name        | Amount | Use for   | Time     |
|-------------|-------------|--------|-----------|----------|
| Water Agent | Laktoza     | 500 g  | Boil      | 5 min    |
| Flavor      | Pulpa mango | 850 g  | Secondary | 7 day(s) |