

# mango

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **19**
- SRM **4**
- 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 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **15.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **30 min** at **72C**
- Sparge using **14.9 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 | 3.5 kg (60.3%) | 80 %   | 5   |
| Grain | Viking Wheat Malt    | 1 kg (17.2%)   | 83 %   | 5   |
| Grain | Płatki owsiane       | 0.5 kg (8.6%)  | 85 %   | 3   |
| Sugar | Milk Sugar (Lactose) | 0.6 kg (10.3%) | 76.1 % | 0   |
| Grain | Żytni                | 0.2 kg (3.4%)  | --- %  | --- |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Warrior | 10 g   | 60 min | 15.5 %     |
| Aroma (end of boil) | Mosaic  | 30 g   | 1 min  | 12.3 %     |
| Boil                | Cascade | 20 g   | 5 min  | 4 %        |

## Yeasts

| Name                        | Type | Form   | Amount | Laboratory       |
|-----------------------------|------|--------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale  | Liquid | 20 ml  | Fermentum Mobile |

## Extras

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

|        |                      |        |           |          |
|--------|----------------------|--------|-----------|----------|
| Spice  | Kolendra - do kuchni | 17 g   | Boil      | 10 min   |
| Flavor | Pulpa mango          | 1700 g | Secondary | 7 day(s) |