

# Mangolina Milkshake IPA 17BLG

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **45**
- SRM **4.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **23.8 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **19 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount           | Yield | EBC |
|-------|---------------------------|------------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 3.5 kg (73.7%)   | 85 %  | 7   |
| Grain | Platki owsiane            | 0.625 kg (13.2%) | 85 %  | 3   |
| Grain | Platki pszeniczne         | 0.625 kg (13.2%) | 85 %  | 3   |

## Hops

| Use for   | Name    | Amount | Time     | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil      | Simcoe  | 15 g   | 60 min   | 13.2 %     |
| Boil      | Simcoe  | 25 g   | 10 min   | 13.2 %     |
| Whirlpool | Eureka! | 30 g   | 10 min   | 18 %       |
| Dry Hop   | Equinox | 50 g   | 7 day(s) | 13.1 %     |

## Yeasts

| Name                 | Type | Form   | Amount | Laboratory       |
|----------------------|------|--------|--------|------------------|
| FM55 Zielone Wzgórze | Ale  | Liquid | 40 ml  | Fermentum Mobile |

## Extras

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

|        |              |        |         |           |
|--------|--------------|--------|---------|-----------|
| Other  | Laktoza      | 625 g  | Primary | 7 day(s)  |
| Flavor | Mango Pureee | 1000 g | Primary | 10 day(s) |