# Milkshake IPA z mango Homebrewing

- Gravity 16.8 BLG
- ABV **7.1** %
- IBU 6
- 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 16.8 liter(s)
- Total mash volume 22.4 liter(s)

### **Steps**

- Temp **67 C**, Time **40 min** Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **1 min**

# Mash step by step

- Heat up 16.8 liter(s) of strike water to 74.8C
- Add grains
- Keep mash 40 min at 67C
- Keep mash 10 min at 72C
- Keep mash 1 min at 76C
- Sparge using 14.1 liter(s) of 76C water or to achieve 25.3 liter(s) of wort

# **Fermentables**

| Туре  | Name                 | Amount                | Yield  | EBC |
|-------|----------------------|-----------------------|--------|-----|
| Grain | Viking Pale Ale malt | 4 kg <i>(65.6%)</i>   | 80 %   | 5   |
| Grain | Płatki owsiane       | 0.8 kg <i>(13.1%)</i> | 85 %   | 3   |
| Grain | Płatki pszeniczne    | 0.8 kg <i>(13.1%)</i> | 85 %   | 3   |
| Sugar | Milk Sugar (Lactose) | 0.5 kg (8.2%)         | 76.1 % | 0   |

## Hops

| Use for             | Name    | Amount | Time     | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil                | Mosaic  | 10 g   | 10 min   | 10 %       |
| Aroma (end of boil) | Equinox | 50 g   | 1 min    | 13.1 %     |
| Dry Hop             | Mosaic  | 50 g   | 3 day(s) | 10 %       |

### **Yeasts**

| Name        | Туре | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale  | Dry  | 11.5 g | Fermentis  |

### **Extras**

| Type | Name    | Amount | Use for | Time |
|------|---------|--------|---------|------|
| Type | Italiic | Amount | 030 101 |      |

| Flavor | Dulna - manga | 1000 ~ | Drimoori | 11 do./(a) |
|--------|---------------|--------|----------|------------|
| Havor  | Pulpa z mango | 1000 g | Primary  | II day(s)  |