

# Tropikalny Milkshake

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- Gravity **14.3 BLG**
- ABV ---
- IBU **37**
- SRM **5.4**
- Style **Spice, Herb, or Vegetable Beer**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **15.5 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **12.1 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount          | Yield  | EBC |
|-------|----------------------|-----------------|--------|-----|
| Grain | Pilzneński           | 1.75 kg (50.7%) | 81 %   | 4   |
| Grain | Płatki pszeniczne    | 0.4 kg (11.6%)  | 80 %   | 3   |
| Grain | Płatki owsiane       | 0.4 kg (11.6%)  | 80 %   | 3   |
| Grain | Pszeniczny           | 0.65 kg (18.8%) | 80 %   | 4   |
| Sugar | Milk Sugar (Lactose) | 0 kg            | 76.1 % | 0   |
| Grain | Abbey Malt Weyermann | 0.25 kg (7.2%)  | 75 %   | 45  |

## Hops

| Use for   | Name                   | Amount | Time     | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil      | Columbus/Tomahawk/Zeus | 5 g    | 40 min   | 15.5 %     |
| Whirlpool | Galaxy                 | 100 g  | 5 min    | 15 %       |
| Dry Hop   | Vic Secret             | 50 g   | 3 day(s) | 16.3 %     |

## Yeasts

| Name | Type | Form  | Amount | Laboratory  |
|------|------|-------|--------|-------------|
| S-33 | Ale  | Slant | 1.5 ml | Wyeast Labs |