

# Milkshake IPA 3.0

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **44**
- SRM **4.5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

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

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **20.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount        | Yield  | EBC |
|-------|---------------------------|---------------|--------|-----|
| Grain | Weyermann - Pale Ale Malt | 5 kg (80.6%)  | 85 %   | 7   |
| Grain | Płatki owsiane            | 0.4 kg (6.5%) | 85 %   | 3   |
| Grain | Płatki pszeniczne         | 0.4 kg (6.5%) | 85 %   | 3   |
| Sugar | Milk Sugar (Lactose)      | 0.4 kg (6.5%) | 76.1 % | 0   |

## Hops

| Use for    | Name     | Amount | Time   | Alpha acid |
|------------|----------|--------|--------|------------|
| First Wort | lunga    | 30 g   | 60 min | 11 %       |
| First Wort | Marynka  | 18 g   | 60 min | 8.8 %      |
| Whirlpool  | Citra    | 25 g   | 0 min  | 13.5 %     |
| Whirlpool  | Simcoe   | 25 g   | 0 min  | 13.1 %     |
| Whirlpool  | Amarillo | 50 g   | 0 min  | 8.7 %      |
| Whirlpool  | Mosaic   | 50 g   | 0 min  | 12 %       |

## Yeasts

| Name                 | Type | Form   | Amount | Laboratory       |
|----------------------|------|--------|--------|------------------|
| FM52 Amerykański Sen | Ale  | Liquid | 250 ml | Fermentum Mobile |

## Extras

| Type  | Name     | Amount | Use for   | Time      |
|-------|----------|--------|-----------|-----------|
| Other | Mango    | 900 g  | Secondary | 14 day(s) |
| Other | Marakuja | 400 g  | Secondary | 14 day(s) |
| Other | Maliny   | 900 g  | Secondary | 14 day(s) |

## Notes

- Do podziału na dwa wiadra po 12L - jedno z mango i marakują, drugie z malinami.  
*May 12, 2019, 7:36 PM*