

mango milkshake ipa

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **41**
- SRM **4.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **35.8 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **21.8 liter(s)** of **76C** water or to achieve **35.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|----------------|--------|-----|
| Grain | Briess - Pale Ale Malt | 5 kg (64.5%) | 80 % | 7 |
| Grain | Pszeniczny | 1 kg (12.9%) | 85 % | 4 |
| Grain | Płatki owsiane | 1 kg (12.9%) | 85 % | 3 |
| Sugar | Milk Sugar (Lactose) | 0.75 kg (9.7%) | 76.1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Summit | 10 g | 60 min | 18 % |
| Boil | Summit | 10 g | 30 min | 18 % |
| Boil | Summit | 10 g | 15 min | 18 % |
| Boil | Equinox | 30 g | 15 min | 13.1 % |
| Boil | Citra | 30 g | 0 min | 12 % |
| Boil | Mosaic | 30 g | 0 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 200 ml | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------|--------|-----------|--------|
| Flavor | laktoza | 750 g | Boil | 10 min |
| Flavor | pulpa mango | 1700 g | Secondary | --- |