

Tropical Milkshake IPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **36**
- SRM **5.4**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.8 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **16.8 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11 liter(s)**
- Total mash volume **14.2 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **11 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **16.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|--------|-----|
| Grain | Viking Pale Ale malt | 1.5 kg (37%) | 80 % | 5 |
| Grain | Viking Wheat Malt | 0.6 kg (14.8%) | 83 % | 5 |
| Sugar | Milk Sugar (Lactose) | 0.4 kg (9.9%) | 76.1 % | 0 |
| Grain | Płatki pszeniczne | 0.4 kg (9.9%) | 85 % | 3 |
| Grain | Płatki owsiane | 0.4 kg (9.9%) | 85 % | 3 |
| Grain | Biscuit Malt | 0.25 kg (6.2%) | 79 % | 45 |
| Sugar | pulpa marakui | 0.5 kg (12.3%) | 24 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 10 g | 60 min | 15 % |
| Whirlpool | Mosaic | 25 g | 20 min | 12.2 % |
| Dry Hop | Nelson Sauvín | 50 g | 3 day(s) | 11 % |
| Dry Hop | Mosaic | 75 g | 3 day(s) | 12.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--------------|-----|-------|--------|---------|
| Safbrew S-33 | Ale | Slant | 200 ml | Safbrew |
|--------------|-----|-------|--------|---------|

Extras

| Type | Name | Amount | Use for | Time |
|-------|---------------|--------|---------|----------|
| Other | pulpa marakui | 500 g | Primary | 5 day(s) |