

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)