Mango milkshake ipa

- Gravity **14.3 BLG**
- ABV **---**
- IBU **67**
- SRM **4.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **10 %**
- Size with trub loss **26.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **70 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **70 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg *(71.4%)*	80 %	5
Grain	Płatki pszeniczne	1 kg *(14.3%)*	85 %	3
Grain	Płatki owsiane	1 kg *(14.3%)*	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	26 g	60 min	13.7 %
Boil	Chinook	26 g	30 min	11.1 %
Boil	Citra	21 g	15 min	13.5 %
Boil	Cascade PL	20 g	15 min	7.6 %
Boil	Cascade PL	12 g	5 min	7.6 %
Aroma (end of boil)	Citra	16 g	0 min	13.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	15 min
Flavor	Skórka pomarańczy	100 g	Boil	10 min
Flavor	Pulpa z mango	2500 g	Secondary	7 day(s)
Flavor	Laktoza	500 g	Boil	15 min
Flavor	Skórka pomarańczy	50 g	Secondary	7 day(s)