

MANGO MILKSHAKE IPA

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **33**
- SRM **4.2**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 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 **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **68 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **50 min** at **68C**
- Keep mash **20 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 (64.9%)	80 %	5
Grain	Płatki owsiane	1 kg (13%)	60 %	3
Grain	Płatki pszeniczne	1 kg (13%)	60 %	3
Sugar	Milk Sugar (Lactose)	0.7 kg (9.1%)	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	40 g	30 min	11 %
Boil	Marynka	10 g	10 min	10 %
Boil	Ahtanum	30 g	10 min	5 %
Dry Hop	Citra	25 g	4 day(s)	12 %
Dry Hop	Columbus/Tomahawk/Zeus	25 g	4 day(s)	15.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Flavor	Pulpa z mango	2500 g	Secondary	7 day(s)