

Milkshake Mango IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **11**
- SRM **4.8**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **20.8 liter(s)**
- Total mash volume **27.3 liter(s)**

Steps

- Temp **68 C**, Time **40 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20.8 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **40 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	4.5 kg (69.2%)	81 %	5
Grain	Castle Malting owsiany	1 kg (15.4%)	85 %	5
Grain	Płatki owsiane	0.5 kg (7.7%)	85 %	3
Grain	płatki jęczmienne	0.5 kg (7.7%)	60 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Equinox	50 g	10 min	13.1 %
Dry Hop	Mosaic	50 g	18 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	500 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
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Flavor	Mango	1500 g	Primary	18 day(s)
Flavor	Laktoza	500 g	Boil	10 min
Flavor	zest z pomarańczy	200 g	Primary	18 day(s)