

# Milkshake IPA - Mango & Ananas & Papaja

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **63**
- SRM **5.4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **40 %/h**
- Boil size **16.1 liter(s)**

## Mash information

- Mash efficiency **76.5 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **12.6 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **9.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **16.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale	1.5 kg (53.6%)	80 %	6
Grain	Weyermann - Monachijski I	0.5 kg (17.9%)	80 %	16
Grain	Płatki owsiane błyskawiczne	0.6 kg (21.4%)	75 %	3
Grain	Weyermann - Carapils	0.2 kg (7.1%)	75 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	USA Tomahawk	10 g	60 min	15.8 %
Boil	USA Cascade	25 g	15 min	6.8 %
Boil	USA Amarillo	40 g	5 min	7.4 %
Boil	USA Cascade	15 g	0 min	6.8 %
Dry Hop	USA Amarillo	10 g	3 day(s)	7.4 %
Dry Hop	USA Cascade	10 g	3 day(s)	6.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05 II	Ale	Slant	50 ml	---
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### Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	250 g	Boil	0 min
Flavor	Mango, Ananas, Papaja	900 g	Primary	10 day(s)
Flavor	Wanilia	1 g	Secondary	0 day(s)