

# Mango Milkshake IPA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **33**
- SRM **3.3**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **40 liter(s)**
- Trub loss **3 %**
- Size with trub loss **41.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **49.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **33.2 liter(s)**
- Total mash volume **41.5 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **33.2 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **78C**
- Sparge using **24.8 liter(s)** of **76C** water or to achieve **49.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	7 kg (75.3%)	81 %	4
Grain	Słód owsiany Fawcett	1 kg (10.8%)	61 %	5
Grain	Oats, Flaked	0.3 kg (3.2%)	80 %	2
Sugar	Milk Sugar (Lactose)	1 kg (10.8%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	30 g	60 min	18 %
Aroma (end of boil)	Citra	20 g	5 min	12 %
Aroma (end of boil)	Citra	20 g	0 min	12 %
Whirlpool	Citra	20 g	0 min	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	10 g	Fermentis
Safale S-04	Ale	Dry	10 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	Mango	1000 g	Secondary	3 day(s)

## Notes

- Mango z puszki  
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