

# Milkshake ipa mango ananas

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **41**
- SRM **4.6**
- 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 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **68 C**, Time **15 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **15 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Grain	Pszeniczny	1 kg (16.7%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	200 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Other	Ananas pieczony	1000 g	Secondary	7 day(s)
Other	Pulpa mango	500 g	Secondary	7 day(s)
Other	laktoza	500 g	Boil	1 min