

# milkshake ananas mango ipa

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **50**
- SRM **4.6**
- Style **American Pale Ale**

## 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 **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **40 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3 kg (50%)	80 %	4
Grain	Viking Pale Ale malt	2 kg (33.3%)	80 %	5
Grain	Pszeniczny	0.5 kg (8.3%)	85 %	4
Grain	Strzegom Karmel 30	0.5 kg (8.3%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	30 g	60 min	11 %
Boil	Azacca	10 g	30 min	14 %
Boil	Citra	10 g	15 min	12 %
Aroma (end of boil)	Citra	10 g	2 min	12 %
Whirlpool	Azacca	40 g	5 min	14 %
Dry Hop	Citra	30 g	5 day(s)	12 %
Dry Hop	Azacca	30 g	5 day(s)	14 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Slant	1000 ml	Fermentis
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### Extras

Type	Name	Amount	Use for	Time
Flavor	laktoza	500 g	Boil	15 min
Flavor	ananas	500 g	Secondary	7 day(s)
Flavor	mango	500 g	Secondary	7 day(s)