

# Pineapple milkshake ipa

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- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **39**
- SRM **4.9**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **50 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	4.5 kg (61.6%)	79 %	6
Grain	Płatki owsiane	0.8 kg (11%)	85 %	3
Grain	Bestmalz Carmel Pils	0.3 kg (4.1%)	75 %	5
Sugar	Milk Sugar (Lactose)	0.7 kg (9.6%)	76.1 %	0
Grain	Pszeniczny	1 kg (13.7%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	10 g	50 min	15 %
Boil	Citra	20 g	10 min	12 %
Boil	Azacca	20 g	10 min	14 %
Boil	Galaxy	20 g	10 min	15 %
Dry Hop	Amarillo	30 g	5 day(s)	9.5 %
Dry Hop	Citra	20 g	5 day(s)	12 %
Dry Hop	ekuanot	20 g	5 day(s)	16 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM55 Zielone Wzgórze	Ale	Liquid	30 ml	Fermentum Mobile

### Extras

Type	Name	Amount	Use for	Time
Flavor	ananas	1500 g	Secondary	24 day(s)
Flavor	ananas	800 g	Secondary	8 day(s)