

# Pineapple milkshake ipa

- 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

| <b>Name</b>          | <b>Type</b> | <b>Form</b> | <b>Amount</b> | <b>Laboratory</b> |
|----------------------|-------------|-------------|---------------|-------------------|
| FM55 Zielone Wzgórze | Ale         | Liquid      | 30 ml         | Fermentum Mobile  |

### **Extras**

| <b>Type</b> | <b>Name</b> | <b>Amount</b> | <b>Use for</b> | <b>Time</b> |
|-------------|-------------|---------------|----------------|-------------|
| Flavor      | ananas      | 1500 g        | Secondary      | 24 day(s)   |
| Flavor      | ananas      | 800 g         | Secondary      | 8 day(s)    |