

# Marakuja sour

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **21**
- SRM **4.3**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6.9 liter(s)**
- Total mash volume **9.2 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **6.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **12.7 liter(s)** of wort

## Fermentables

| Type  | Name            | Amount         | Yield | EBC |
|-------|-----------------|----------------|-------|-----|
| Grain | Castle Pale Ale | 1.2 kg (52.2%) | 80 %  | 8   |
| Grain | Pszeniczny      | 1 kg (43.5%)   | 85 %  | 4   |
| Grain | Płatki owsiane  | 0.1 kg (4.3%)  | 85 %  | 3   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Cascade | 5 g    | 60 min | 6 %        |
| Boil    | Cascade | 10 g   | 30 min | 6 %        |
| Boil    | Cascade | 15 g   | 5 min  | 6 %        |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| S-05 | Ale  | Dry  | 6 g    | ---        |

## Extras

| Type        | Name               | Amount | Use for   | Time     |
|-------------|--------------------|--------|-----------|----------|
| Flavor      | Przecier z marakui | 850 g  | Secondary | 6 day(s) |
| Water Agent | kwas mlekowy       | 20 g   | Secondary | 6 day(s) |