

# Mango Pastry Sour

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **29**
- SRM **3.8**
- 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **16.2 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield  | EBC |
|-------|----------------------|----------------|--------|-----|
| Grain | Pilzneński           | 2.5 kg (42.4%) | 81 %   | 4   |
| Grain | Pszeniczny           | 2 kg (33.9%)   | 85 %   | 4   |
| Grain | Płatki owsiane       | 0.5 kg (8.5%)  | 85 %   | 3   |
| Grain | Płatki pszeniczne    | 0.4 kg (6.8%)  | 85 %   | 3   |
| Sugar | Milk Sugar (Lactose) | 0.5 kg (8.5%)  | 76.1 % | 0   |

## Hops

| Use for | Name                   | Amount | Time   | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil    | Columbus/Tomahawk/Zeus | 20 g   | 60 min | 15.5 %     |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-33 | Ale  | Dry  | 11.5 g | Fermentis  |

## Extras

| Type  | Name                      | Amount | Use for  | Time |
|-------|---------------------------|--------|----------|------|
| Other | Hopzoil Twisted Fruitbomb | 0.5 g  | Bottling | ---  |

| Hopzoil Twisted Fruitbomb 0,5ml na 20l - rozcieńczone w 2,5 ml wódki |              |       |           |           |
|--|--------------|-------|-----------|-----------|
| Flavor   | pulpa mango  | 900 g | Secondary | 10 day(s) |
| Other  | Kwas mlekowy | 100 g | Bottling  | ---       |