

# 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	---