

# Sour Mango Ale

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **11**
- SRM **4.4**
- Style **Specialty Beer**

## 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **22.4 liter(s)**

## Steps

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

## Mash step by step

- Heat up **16.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (50%)	80 %	5
Grain	Wheat, Flaked	0.5 kg (8.3%)	77 %	4
Grain	Strzegom Pszeniczny	1.3 kg (21.7%)	81 %	6
Grain	Oats, Flaked	0.5 kg (8.3%)	80 %	2
Sugar	Milk Sugar (Lactose)	0.4 kg (6.7%)	76.1 %	0
Grain	Weyermann - Acidulated Malt	0.3 kg (5%)	80 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Marynka	20 g	20 min	8.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM51 Grodzie Dębowe	Ale	Liquid	10 ml	Fermentum Mobile
lactobacillus	Ale	Culture	5 g	serowar

## Extras

Type	Name	Amount	Use for	Time
Water Agent	kwas mlekowy	15 g	Mash	---
Flavor	mango	3000 g	Secondary	14 day(s)