

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 | kwask mlekowy | 15 g | Mash | --- |
| Flavor | mango | 3000 g | Secondary | 14 day(s) |