

Mango Sour Ale

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **1**
- SRM **4.8**
- Style **Fruit Beer**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.9 liter(s)**
- Total mash volume **11.8 liter(s)**

Steps

- Temp **72 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **8.9 liter(s)** of strike water to **80.6C**
- Add grains
- Keep mash **70 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	2 kg (67.8%)	81 %	4
Grain	Pszeniczny	0.5 kg (16.9%)	85 %	4
Grain	Oats, Flaked	0.25 kg (8.5%)	80 %	2
Grain	Abbey Malt Weyermann	0.2 kg (6.8%)	75 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Saaz (Czech Republic)	5 g	5 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	Fermentis

Extras

Type	Name	Amount	Use for	Time
Flavor	pulpa mango	1000 g	Secondary	10 day(s)
Water Agent	chlerek wapnia	4 g	Mash	60 min

Water Agent	gips	2 g	Mash	60 min
Other	l. plantarum	2.5 g	Primary	1 day(s)