

# Sour Hoppy IPA #1

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **60**
- SRM **5.1**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **12.7 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	4 kg (63.5%)	80 %	5
Grain	Weyermann - Vienna Malt	1 kg (15.9%)	81 %	8
Grain	Weyermann - Pale Wheat Malt	1 kg (15.9%)	85 %	5
Grain	Weyermann - Acidulated Malt	0.3 kg (4.8%)	80 %	6

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	15.5 %
Boil	Mosaic	20 g	10 min	10 %
Boil	Citra	20 g	10 min	12 %
Dry Hop	Mosaic	30 g	---	10 %
Dry Hop	Citra	30 g	---	12 %
Dry Hop	Amarillo	30 g	---	9.5 %

## Yeasts

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

## Notes

- Starter Lacto:  
lactobacillus plantarum 10mld CFU  
lactobacillus rhamnosus 10 mld CFU  
ekstrakt słodowy 100 g  
900 ml wody  
100 ml pasteryzowanego soku jabłkowego (ew. 10g glukozy)  
10g kredy  
1g pożywki drożdżowej Enartis Nutriferm Arom  
na 24-48 w 45 st. C  
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