

# ORANGE SOUR IPA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **55**
- SRM **3.7**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **4 %**
- Size with trub loss **23.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **18.1 liter(s)**
- Total mash volume **23.6 liter(s)**

## Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18.1 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (83.3%)	81 %	4
Grain	Carapils	0.5 kg (8.3%)	78 %	4
Sugar	Laktoza	0.5 kg (8.3%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	20 g	60 min	12.8 %
Boil	Chinook	30 g	25 min	12.8 %
Boil	Cascade	25 g	10 min	5.8 %
Boil	Cascade	25 g	5 min	5.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
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Spice	Skórka słodkiej pomarańczy	5 g	Boil	15 min
Spice	Skórka curacao	5 g	Boil	15 min

## Notes

- Brzecznię zakwasić *Lactobacillus Plantarum* przez 24h w temp 35°C (zaizolować termicznie).  
Po gotowaniu, przed zadaniem drożdży dodać 2l soku pomarańczowego 100% (pasteryzowany, ok. 10\*Plato).  
Po dodaniu soku poziom goryczki spada z 55 do ok. 50 IBU.  
Finalny planowany ekstrakt około 14\*Plato.  
*May 26, 2019, 8:11 PM*