

# Sour Ale

- Gravity **7.6 BLG**
- ABV **2.9 %**
- IBU **18**
- SRM **3.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **14 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **80 C**, Time **5 min**

## Mash step by step

- Heat up **10.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **5 min** at **80C**
- Sparge using **19.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.7 kg (77.1%)	81 %	4
Grain	Pszeniczny	0.7 kg (20%)	85 %	4
Grain	Karmelowy Jasny 30EBC	0.1 kg (2.9%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	35 g	60 min	4 %
Dry Hop	Cascade	50 g	7 day(s)	6 %
Dry Hop	Nelson Sauvín	50 g	7 day(s)	11 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis
L. Plantarum	Ale	Culture	5 g	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	Sok z grejpfruta	2000 g	Primary	7 day(s)

## Notes

- Zakwaszanie L. Plantarum 48godzin w 33 stopniach  
*Aug 29, 2018, 11:38 PM*