

# Sour Ale

- Gravity **10 BLG**
- ABV **4 %**
- IBU **4**
- SRM **3.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **60 min**

## Mash step by step

- Heat up **12 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **60 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	2 kg (50%)	81 %	4
Grain	Pszeniczny	2 kg (50%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Whirlpool	Magnum	5 g	60 min	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
L Planatarum	Ale	Dry	3 g	---
US-05	Ale	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Water Agent	CaCl2	5 g	Mash	60 min
Water Agent	Lactic Acid	15 g	Mash	60 min
Fining	Whirlfloc-T	2.5 g	Boil	10 min