

# Sour Ale

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **42**
- SRM **5.6**
- Style **Fruit Beer**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **13.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **13.1 liter(s)**
- Total mash volume **16 liter(s)**

## Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **13.1 liter(s)** of strike water to **72.2C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **3.2 liter(s)** of **76C** water or to achieve **13.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (69%)	80 %	5
Grain	Strzegom Bursztynowy	0.2 kg (6.9%)	70 %	49
Grain	Pszeniczny	0.2 kg (6.9%)	85 %	4
Grain	Płatki owsiane	0.5 kg (17.2%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	15 g	45 min	13 %
Aroma (end of boil)	Chinook	10 g	5 min	13 %
Whirlpool	Chinook	10 g	0 min	13 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Slant	80 ml	---

## Extras

Type	Name	Amount	Use for	Time
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Other	Kwas mlekowy	8 g	Boil	0 min
Other	L. planraturum	15 g	Primary	1 day(s)
Flavor	wiśnie	2000 g	Secondary	5 day(s)