

Pastry Sour Ale

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **30**
- SRM **3.9**
- Style **Fruit Beer**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

Steps

- Temp **64 C**, Time **10 min**
- Temp **68 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **17.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **10 min** at **64C**
- Keep mash **15 min** at **68C**
- Keep mash **45 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	3 kg (51.7%)	85 %	4
Grain	Strzegom Pilzneński	2.2 kg (37.9%)	80 %	4
Grain	Płatki owsiane	0.6 kg (10.3%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	5 g	60 min	15 %
Aroma (end of boil)	Galaxy	5 g	5 min	15 %
Whirlpool	Galaxy	40 g	30 min	15 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	11.5 g	safale

Extras

Type	Name	Amount	Use for	Time
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Flavor	laktoza	1000 g	Boil	10 min
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