Sour ale

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **3**
- SRM **4.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **10 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **40 min**
- Evaporation rate **10 %/h**
- Boil size **15.4 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9 liter(s)**
- Total mash volume **12 liter(s)**

Steps

- Temp **66 C**, Time **70 min**

Mash step by step

- Heat up **9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Sparge using **9.4 liter(s)** of **76C** water or to achieve **15.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	1.8 kg *(60%)*	81 %	5
Grain	Weyermann pszeniczny jasny	1 kg *(33.3%)*	80 %	6
Grain	Płatki owsiane	0.2 kg *(6.7%)*	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Książęcy	10 g	5 min	7 %
Whirlpool	Mosaic	25 g	0 min	10 %
Whirlpool	Talus	25 g	0 min	8.2 %
Dry Hop	Mosaic	25 g	4 day(s)	10 %
Dry Hop	Talus	25 g	4 day(s)	8.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis