Sour Ale 2

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **17**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **2.5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **15 min**
- Evaporation rate **15 %/h**
- Boil size **21.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **6.2 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **28.8 liter(s)**

Steps

- Temp **69 C**, Time **60 min**

Mash step by step

- Heat up **24.8 liter(s)** of strike water to **73C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **0.4 liter(s)** of **76C** water or to achieve **21.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3 kg *(75%)*	80 %	7
Grain	Weyermann - Pale Wheat Malt	1 kg *(25%)*	85 %	5

Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	mossaic	50 g	5 min	12.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	500 ml	Safale

Extras

Type	Name	Amount	Use for	Time
Other	L.Rhamnosus	4.4 g	Primary	2 day(s)
Other	L.Plantarum	2.7 g	Primary	2 day(s)