

Sour Ale

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **3**
- SRM **7.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **13.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **65 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **5.8 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3.2 kg (80%)	81 %	4
Grain	Oats, Malted	0.4 kg (10%)	80 %	2
Grain	Oats, Flaked	0.2 kg (5%)	80 %	2
Grain	Aroma CastleMalting	0.2 kg (5%)	78 %	100

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	3 g	15 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Lachancea	Ale	Slant	80 ml	Lallemand