

## #63 Sour Ale

---

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **13**
- SRM **4.5**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **2 %**
- Size with trub loss **15.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **17.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.6 liter(s)**
- Total mash volume **12.8 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **9.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **0 min** at **78C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **17.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (62.5%)	80 %	5
Grain	Strzegom Pszeniczny	1 kg (31.3%)	81 %	6
Grain	Caramel/Crystal Malt - 10L	0.2 kg (6.3%)	75 %	20

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lemon drop	50 g	10 min	4.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM55 Zielone Wzgórze	Ale	Liquid	30 ml	Fermentum Mobile
WLP677 - Lactobacillus Bacteria	Ale	Liquid	30 ml	White Labs