

Sour Ale

- Gravity **10 BLG**
- ABV **4 %**
- IBU **4**
- SRM **3.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **60 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **60 min** at **78C**
- Sparge using **18.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------|------------|-------|-----|
| Grain | Pilznieński | 2 kg (50%) | 81 % | 4 |
| Grain | Pszeniczny | 2 kg (50%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------|--------|--------|------------|
| Whirlpool | Magnum | 5 g | 60 min | 13.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| L Planatarum | Ale | Dry | 3 g | --- |
| US-05 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-------------|--------|---------|--------|
| Water Agent | CaCl2 | 5 g | Mash | 60 min |
| Water Agent | Lactic Acid | 15 g | Mash | 60 min |
| Fining | Whirlfloc-T | 2.5 g | Boil | 10 min |