

Hoppy sour ale

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **12**
- SRM **4.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.1 liter(s)**
- Total mash volume **9.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **7.1 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **76C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|-----------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 1.6 kg (68.1%) | 80 % | 7 |
| Grain | Pszeniczny | 0.5 kg (21.3%) | 85 % | 4 |
| Grain | Płatki owsiane | 0.25 kg (10.6%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Aroma (end of boil) | Mosaic | 15 g | 5 min | 10 % |
| Aroma (end of boil) | Citra | 10 g | 5 min | 12 % |
| Dry Hop | Mosaic | 15 g | 2 day(s) | 10 % |
| Dry Hop | Citra | 50 g | 2 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| S-05 | Ale | Dry | 6 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|--------------|--------|-----------|----------|
| Water Agent | Kwas Mlekowy | 30 g | Secondary | 2 day(s) |
| Water Agent | Kwas Mlekowy | 10 g | Bottling | --- |