

[P] Citrus Pale Ale

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **40**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12 liter(s)**
- Boil time **60 min**
- Evaporation rate **30 %/h**
- Boil size **16.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **9.2 liter(s)**
- Total mash volume **11.9 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **67 C**, Time **30 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **9.2 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **67C**
- Keep mash **1 min** at **78C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **16.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|---------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 0.74 kg (28%) | 85 % | 7 |
| Grain | Simpsons - Maris Otter | 1.9 kg (72%) | 81 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------|--------|--------|------------|
| Boil | USA Cascade | 26 g | 60 min | 6.8 % |
| Boil | Citra | 50 g | 1 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale | Dry | 11 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------|-----------------------------------|--------|---------|-------|
| Spice | Dehydratyzowana skórka grejpfruta | 6 g | Boil | 1 min |

| | | | | |
|-------|--|-----|-----------|----------|
| Spice | Dehydratyzowana skórka cytryny | 6 g | Boil | 1 min |
| Spice | Dehydratyzowana skórka pomarańczy | 6 g | Secondary | 3 day(s) |
| Spice | Dehydratyzowana skórka gorzkiej pomarańczy | 6 g | Secondary | 3 day(s) |
| Spice | Dehydratyzowana skórka limonki | 6 g | Secondary | 3 day(s) |
| Spice | Skórka granata | 6 g | Boil | 1 min |