

Orange Pale Ale

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **33**
- SRM **4.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.7 liter(s)**
- Total mash volume **15.1 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **11.7 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **6.9 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Bestmalz - Pale Ale | 2 kg (59.7%) | 80.5 % | 6 |
| Grain | Bestmalz - Pszeniczny jasny | 0.9 kg (26.9%) | 82 % | 5 |
| Grain | Castle Malting - Owsiany | 0.3 kg (9%) | 78.5 % | 5 |
| Grain | Acid Malt | 0.15 kg (4.5%) | 58.7 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------|--------|--------|------------|
| First Wort | Sabro | 5 g | 60 min | 15 % |
| Boil | Sabro | 5 g | 20 min | 15 % |
| Boil | Sabro | 5 g | 10 min | 15 % |
| Boil | Sabro | 10 g | 5 min | 15 % |
| Aroma (end of boil) | Sabro | 10 g | 0 min | 15 % |
| Whirlpool | Sabro | 15 g | 0 min | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------------------|------|--------|--------|-------------|
| Wyeast - American Ale II | Ale | Liquid | 125 ml | Wyeast Labs |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-------------------------------|--------|-----------|----------|
| Flavor | Curacao | 10 g | Boil | 15 min |
| Flavor | Kandyzowane skórki pomarańczy | 10 g | Secondary | 5 day(s) |