

Mandarina Pale Ale

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **29**
- SRM **4.2**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.31 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **20.7 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **71.8C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 2.5 kg (52.1%) | 80 % | 4 |
| Grain | Strzegom Pale Ale | 1.5 kg (31.3%) | 79 % | 6 |
| Grain | Caramel/Crystal Malt - 10L | 0.3 kg (6.3%) | 75 % | 20 |
| Grain | Płatki owsiane | 0.5 kg (10.4%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|----------|------------|
| Aroma (end of boil) | Mandarina Bavaria | 60 g | 10 min | 7.6 % |
| Boil | Magnum | 10 g | 30 min | 13.5 % |
| Dry Hop | Mandarina Bavaria | 40 g | 0 day(s) | 7.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |