

Mandaryna Pale Ale

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **55**
- SRM **5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

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

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Pilzneński | 3 kg (56.6%) | 81 % | 4 |
| Grain | Viking Pale Ale malt | 1.9 kg (35.8%) | 80 % | 5 |
| Grain | Caramel/Crystal Malt - 30L | 0.4 kg (7.5%) | 75 % | 59 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Magnum | 13 g | 70 min | 13.5 % |
| Boil | Mandarina Bavaria | 25 g | 15 min | 10 % |
| Boil | Mandarina Bavaria | 50 g | 10 min | 10 % |
| Boil | Mandarina Bavaria | 50 g | 5 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|---------|------------|
| US-05 | Ale | Dry | 13.75 g | fermentis |