

Mandaryna Pale Ale - po modyfikacjach

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **30**
- SRM **11**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **0 %**
- Size with trub loss **25 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **30.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

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

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **30.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Strzegom Monachijski typ II | 2 kg (30.8%) | 79 % | 22 |
| Grain | Strzegom Pale Ale | 3 kg (46.2%) | 79 % | 6 |
| Grain | Słód Crystal | 0.5 kg (7.7%) | 73 % | 160 |
| Grain | Strzegom Wiedeński | 1 kg (15.4%) | 79 % | 10 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil | Marynka | 10 g | 70 min | 8.8 % |
| Boil | Mandarina Bavaria | 20 g | 15 min | 7.5 % |
| Boil | Mandarina Bavaria | 40 g | 10 min | 7.5 % |
| Boil | Mandarina Bavaria | 40 g | 5 min | 7.5 % |

Yeasts

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