

# Pale ale 1

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **22**
- SRM **7.8**
- Style **Mild**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23.4 liter(s)**

## Steps

- Temp **66 C**, Time **40 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **18.2 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **40 min** at **66C**
- Keep mash **30 min** at **72C**
- Sparge using **12.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount        | Yield | EBC |
|-------|------------------------|---------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 4 kg (76.9%)  | 80 %  | 7   |
| Grain | Monachijski            | 1 kg (19.2%)  | 80 %  | 16  |
| Grain | Strzegom Karmel 150    | 0.2 kg (3.8%) | 75 %  | 150 |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Oktawia | 30 g   | 50 min | 7.1 %      |

## Yeasts

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale  | Dry  | 10 g   | Fermentis  |

## Extras

| Type  | Name     | Amount | Use for   | Time     |
|-------|----------|--------|-----------|----------|
| Spice | Hibiskus | 50 g   | Secondary | 7 day(s) |