

# Pale Ale 20L

- Gravity **12.3 BLG**
- ABV ---
- IBU **37**
- SRM **7.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**

## Mash step by step

- Heat up **17.1 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **18.2 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale          | 3.6 kg (73.5%) | 79 %  | 6   |
| Grain | Strzegom Monachijski typ I | 1 kg (20.4%)   | 79 %  | 16  |
| Grain | Strzegom Karmel 30         | 0.3 kg (6.1%)  | 75 %  | 30  |

## Hops

| Use for             | Name     | Amount | Time     | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil                | Marynka  | 5 g    | 60 min   | 10 %       |
| Boil                | Citra    | 20 g   | 25 min   | 13.5 %     |
| Boil                | Citra    | 10 g   | 15 min   | 13.5 %     |
| Aroma (end of boil) | Citra    | 15 g   | 5 min    | 13.5 %     |
| Whirlpool           | Citra    | 10 g   | 0 min    | 13.5 %     |
| Dry Hop             | Citra    | 30 g   | 3 day(s) | 12 %       |
| Dry Hop             | Amarillo | 30 g   | ---      | 9.5 %      |

## Yeasts

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