

# Pierwsze Pale Ale

- Gravity **12.1 BLG**
- ABV ---
- IBU **52**
- SRM **7.9**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **0 %**
- Size with trub loss **20 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.2 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **14.2 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount       | Yield | EBC |
|-------|----------------------------|--------------|-------|-----|
| Grain | Pale Malt (2 Row) UK       | 3.2 kg (80%) | 78 %  | 6   |
| Grain | Monachijski                | 0.6 kg (15%) | 80 %  | 16  |
| Grain | Caramel/Crystal Malt - 40L | 0.2 kg (5%)  | 74 %  | 79  |

## Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil                | Phoenix  | 30 g   | 60 min | 11 %       |
| Aroma (end of boil) | Progress | 40 g   | 10 min | 5.5 %      |

## Yeasts

| Name                  | Type | Form | Amount | Laboratory |
|-----------------------|------|------|--------|------------|
| Danstar - Windsor Ale | Ale  | Dry  | 11 g   | Danstar    |