

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 |