

# Polskie Ale

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- Gravity **11.9 BLG**
- ABV ---
- IBU **43**
- SRM **4.5**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

## Steps

- Temp **62 C**, Time **15 min**
- Temp **66 C**, Time **25 min**
- Temp **70 C**, Time **20 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **25 min** at **66C**
- Keep mash **20 min** at **70C**
- Keep mash **10 min** at **77C**
- Sparge using **18.2 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 4.6 kg (95.8%) | 80 %  | 4   |
| Grain | Karmelowy Czerwony  | 0.2 kg (4.2%)  | 75 %  | 59  |

## Hops

| Use for | Name              | Amount | Time   | Alpha acid |
|---------|-------------------|--------|--------|------------|
| Boil    | Marynka           | 30 g   | 60 min | 10 %       |
| Boil    | Lublin (Lubelski) | 20 g   | 30 min | 4 %        |
| Boil    | Sybilla           | 20 g   | 10 min | 3.5 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |