

# Polskie Ale

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **38**
- SRM **4**

## 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 **15 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.4 liter(s)**
- Total mash volume **17.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **13.4 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type  | Name                                      | Amount         | Yield | EBC |
|-------|---|----------------|-------|-----|
| Grain | Słód Pilsner®<br>2,5-4,5 EBC<br>Weyermann | 4.2 kg (94.4%) | 80 %  | 4   |
| Grain | Karmelowy Jasny<br>30EBC                  | 0.25 kg (5.6%) | 75 %  | 30  |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Marynka           | 30 g   | 60 min | 10 %       |
| Aroma (end of boil) | Lublin (Lubelski) | 15 g   | 15 min | 4 %        |
| Whirlpool           | Lublin (Lubelski) | 20 g   | 0 min  | 4 %        |

## Yeasts

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