

# Zły Pils

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **32**
- SRM **4.7**
- Style **Bohemian Pilsener**

## Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **24.5 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount       | Yield | EBC |
|-------|----------------------------|--------------|-------|-----|
| Grain | Strzegom Pilzneński        | 5 kg (71.4%) | 80 %  | 4   |
| Grain | Strzegom Monachijski typ I | 1 kg (14.3%) | 79 %  | 16  |
| Grain | Bestmalz Carmel Pils       | 1 kg (14.3%) | 75 %  | 5   |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil                | Marynka           | 30 g   | 60 min | 10 %       |
| Boil                | Lublin (Lubelski) | 20 g   | 10 min | 4 %        |
| Aroma (end of boil) | Lublin (Lubelski) | 30 g   | 10 min | 4 %        |
| Whirlpool           | Lublin (Lubelski) | 50 g   | 5 min  | 4 %        |

## Yeasts

| Name             | Type  | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry  | 11.5 g | Fermentis  |