

# 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