

# Polski Pils 12 BLG

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **41**
- SRM **3.4**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **37 liter(s)**
- Trub loss **5 %**
- Size with trub loss **40.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **48.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **29.8 liter(s)**
- Total mash volume **38.3 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **29.8 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **27.5 liter(s)** of **76C** water or to achieve **48.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	7 kg (82.4%)	80 %	4
Grain	Karmelowy (CaraPils 3-5 EBC Weyermann)	1 kg (11.8%)	75 %	5
Grain	Pszeniczny	0.5 kg (5.9%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	8.8 %
Boil	Marynka	35 g	30 min	8.8 %
Boil	Lublin (Lubelski)	25 g	30 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	25 g	15 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM41 Gwoździe i Banany	Ale	Slant	100 ml	Fermentum Mobile