

# Polski Pils I

- Gravity **11 BLG**
- ABV ---
- IBU **29**
- SRM **4.1**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **3 %**
- Size with trub loss **20.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.3 liter(s)**

## Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.1 liter(s)**
- Total mash volume **20.7 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **16.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **78C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **29.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilzneński	3.2 kg (69.6%)	80 %	4
Grain	Weyermann - Monachijski I	1 kg (21.7%)	80 %	16
Grain	Weyermann - Carapils	0.3 kg (6.5%)	75 %	5
Grain	Weyermann - Zakwaszający	0.1 kg (2.2%)	75 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	PL Sybilla	40 g	60 min	6 %
Boil	PL Sybilla	20 g	10 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-189 I	Lager	Dry	11.5 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
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Fining	Mech irlandzki	4 g	Boil	10 min
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