

# Polski Pils

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **30**
- SRM **4.1**

## Batch size

- Expected quantity of finished beer **32 liter(s)**
- Trub loss **5 %**
- Size with trub loss **33.6 liter(s)**
- Boil time **80 min**
- Evaporation rate **12 %/h**
- Boil size **42.7 liter(s)**

## Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **4.2 liter(s) / kg**
- Mash size **29.4 liter(s)**
- Total mash volume **36.4 liter(s)**

## Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **29.4 liter(s)** of strike water to **70.4C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **20.3 liter(s)** of **76C** water or to achieve **42.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	6 kg (85.7%)	81 %	4
Grain	Monachijski	1 kg (14.3%)	80 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	35 g	40 min	11 %
Aroma (end of boil)	Sybilla	50 g	15 min	3.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	11.5 g	Fermentis
Gozdawa Classic Belgian Witbier	Wheat	Dry	10 g	Gozdawa

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech Irlandzki	5 g	Boil	15 min