

# Pils Browar Jana

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **26**
- SRM **4.5**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **2 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (76.2%)	81 %	4
Grain	Monachijski	1 kg (19%)	80 %	16
Grain	karmelowy	0.25 kg (4.8%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	10 g	60 min	11.2 %
Boil	Magnat	10 g	40 min	11.2 %
Boil	Sybilla	10 g	30 min	3.5 %
Aroma (end of boil)	Saaz (Czech Republic)	15 g	5 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Fermentis W34/70	Lager	Dry	23 g	---
Dwie saszetki				