

# Pils Opalenicki

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **37**
- SRM **3.3**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **0 %**
- Size with trub loss **27 liter(s)**
- Boil time **60 min**
- Evaporation rate **1 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **67.3C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (100%)	81 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	30 g	30 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	20 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	whirflock	0.3 g	Boil	15 min