

# Rye Pilsner

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **46**
- SRM **4**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **29.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **5.6 liter(s) / kg**
- Mash size **29.1 liter(s)**
- Total mash volume **34.3 liter(s)**

## Steps

- Temp **62 C**, Time **120 min**
- Temp **72 C**, Time **60 min**
- Temp **78 C**, Time **15 min**
- Temp **50 C**, Time **15 min**

## Mash step by step

- Heat up **29.1 liter(s)** of strike water to **52.7C**
- Add grains
- Keep mash **15 min** at **50C**
- Keep mash **120 min** at **62C**
- Keep mash **60 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **5.8 liter(s)** of **76C** water or to achieve **29.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (76.9%)	81 %	4
Grain	Strzegom Żytni	1 kg (19.2%)	85 %	8
Grain	Viking Dekstrynowy	0.2 kg (3.8%)	79 %	13

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Magnum	15 g	90 min	12 %
Boil	Kohatu	30 g	15 min	7.8 %
Boil	Kohatu	35 g	5 min	7.8 %
Whirlpool	Kohatu	35 g	15 min	7.8 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	200 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Fining	whirlfloc	3 g	Boil	15 min