

# PILS

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **24**
- SRM **2.4**
- Style **Vienna Lager**

## Batch size

- Expected quantity of finished beer **22.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.6 liter(s)**
- Boil time **75 min**
- Evaporation rate **15 %/h**
- Boil size **30.8 liter(s)**

## Mash information

- Mash efficiency **88 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.6 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **15.8 liter(s)** of strike water to **56.9C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.8 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	4.79 kg (100%)	80.5 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	24.46 g	60 min	10 %
Boil	Lublin (Lubelski)*30 w 75*	29.34 g	0 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
safale w34/70	Lager	Dry	11.25 g	safale