

# PILS

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **29**
- SRM **4.1**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **78 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **53 C**, Time **10 min**
- Temp **62 C**, Time **35 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18.9 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **35 min** at **62C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (79.4%)	81 %	4
Grain	Chit Malt	0.5 kg (7.9%)	50 %	2
Grain	BESTMALZ - Best Minich	0.5 kg (7.9%)	80.5 %	16
Grain	Acidulated BESTMALZ	0.3 kg (4.8%)	76 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	20 g	65 min	11.2 %
Aroma (end of boil)	Lublin (Lubelski)	35 g	10 min	6 %
Aroma (end of boil)	Tradition	30 g	5 min	5.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	22 g	Fermentis

## Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Fining	whirlfloc	1.25 g	Boil	15 min