

# Trawniki Pils

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **19**
- SRM **7**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **12.5 liter(s)**
- Total mash volume **17.5 liter(s)**

## Steps

- Temp **54 C**, Time **5 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **12.5 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **5 min** at **54C**
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (60%)	82 %	4.5
Grain	Strzegom Monachijski typ I	2 kg (40%)	79 %	16

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	30 g	45 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	20 g	15 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-23	Lager	Slant	681.81 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Finning	mech irlandzki	1.36 g	Boil	10 min