

# Niemiecki Pils

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **34**
- SRM **3.4**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **29.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **22.2 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **65 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **16.6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **72C**
- Sparge using **18 liter(s)** of **76C** water or to achieve **29.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castelmalting - Słód pilznieński	5 kg (90.3%)	80 %	3
Grain	Weyermann - Słód pilznieński Premium	0.16 kg (2.9%)	80 %	3
Grain	Weyermann - Słód monachijski Typ I	0.18 kg (3.2%)	80 %	15
Grain	Bestmalz - Carapils	0.2 kg (3.6%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	20 g	45 min	10 %
Boil	Hallertau Mittelfruh DE	30 g	30 min	3.7 %
Boil	Hallertau Mittelfruh DE	30 g	15 min	3.7 %
Boil	Hallertau Mittelfruh DE	40 g	3 min	3.7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

Drożdże lagerowe	Lager	Slant	100 ml	---
------------------	-------	-------	--------	-----