

# pils niemiecki

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- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **24**
- SRM **3.6**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

## Steps

- Temp **63 C**, Time **35 min**
- Temp **72 C**, Time **35 min**

## Mash step by step

- Heat up **21 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **35 min** at **63C**
- Keep mash **35 min** at **72C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	6 kg (100%)	82 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	hallertau mitterfluch	50 g	60 min	3 %
Boil	hallertau mitterfluch	50 g	30 min	3 %
Aroma (end of boil)	hallertau mitterfluch	30 g	5 min	3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	300 ml	Fermentis