

Niemiecki Pilsner

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **39**
- SRM **3.1**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **28.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.3 liter(s)**

Steps

- Temp **50 C**, Time **20 min**
- Temp **62 C**, Time **30 min**
- Temp **70 C**, Time **30 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **70C**
- Sparge using **18.1 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	4.3 kg (100%)	90 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tettnang	70 g	90 min	3.7 %
Boil	Tettnang	20 g	45 min	3.7 %
Boil	Tettnang	10 g	15 min	3.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	11.5 g	Fermentis