pils niemiecki

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **24**
- SRM **3.6**
- 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 **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **62 C**, Time **15 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **15 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **21.1 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	6 kg *(100%)*	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	50 min	11.5 %
Boil	Tradition	25 g	5 min	5.4 %
Boil	Tradition	25 g	5 min	5.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
wyest 2206	Lager	Slant	300 ml	---