

Strong Pils Niemiecki (24)

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **29**
- SRM **5.2**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **24.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.2 liter(s)**
- Total mash volume **27.2 liter(s)**

Steps

- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **25 min**

Mash step by step

- Heat up **21.2 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **40 min** at **62C**
- Keep mash **25 min** at **72C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **24.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (82.6%)	81 %	4
Grain	Weyermann - Carapils	0.5 kg (8.3%)	78 %	4
Grain	Strzegom Wiedeński	0.5 kg (8.3%)	79 %	10
Grain	crystal	0.05 kg (0.8%)	80 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	8 %
Boil	Saaz (Czech Republic)	15 g	60 min	2.5 %
Boil	Hallertau Tradition	20 g	20 min	6 %
Aroma (end of boil)	Tettnang	15 g	0 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM30 Bohemska rapsodia	Lager	Slant	250 ml	Fermentum Mobile