

pils

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **58**
- SRM **3.7**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **80 min**
- Evaporation rate **8 %/h**
- Boil size **30 liter(s)**

Mash information

- Mash efficiency **96 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **51 C**, Time **15 min**
- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **55.4C**
- Add grains
- Keep mash **15 min** at **51C**
- Keep mash **60 min** at **68C**
- Sparge using **20 liter(s)** of **76C** water or to achieve **30 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Light Munich Malt	1 kg (25%)	82 %	14
Grain	Weyermann - Bohemian Pilsner Malt	3 kg (75%)	81 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Premiant	10 g	60 min	9.34 %
Boil	Marynka	20 g	45 min	9 %
Boil	Perle	30 g	30 min	6.7 %
Boil	blues	40 g	15 min	5.72 %
Boil	Lublin (Lubelski)	30 g	5 min	4.3 %
Boil	Marynka	20 g	5 min	9 %