

Pils

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **47**
- SRM **3.7**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **13.9 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.8 liter(s)**
- Total mash volume **10.4 liter(s)**

Steps

- Temp **50 C**, Time **30 min**
- Temp **64 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **75 C**, Time **1 min**

Mash step by step

- Heat up **7.8 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **70C**
- Keep mash **1 min** at **75C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **13.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	2.5 kg (96.2%)	81 %	4
Grain	Weyermann - Carapils	0.1 kg (3.8%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	6.5 %
Boil	Marynka	10 g	30 min	6.5 %
Boil	Lublin (Lubelski)	10 g	30 min	3 %
Boil	Marynka	10 g	5 min	6.5 %
Boil	Lublin (Lubelski)	10 g	5 min	3 %
Aroma (end of boil)	Marynka	10 g	1 min	6.5 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	1 min	4 %
Whirlpool	Lublin (Lubelski)	20 g	30 min	4 %
Whirlpool	Marynka	10 g	30 min	6.5 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	2 g	Boil	10 min