

## Pils na lubelskim

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **40**
- SRM **4.1**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **31.2 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **5.5 liter(s) / kg**
- Mash size **30.3 liter(s)**
- Total mash volume **35.8 liter(s)**

### Steps

- Temp **63 C**, Time **120 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **15 min**

### Mash step by step

- Heat up **30.3 liter(s)** of strike water to **66.9C**
- Add grains
- Keep mash **120 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **15 min** at **78C**
- Sparge using **6.4 liter(s)** of **76C** water or to achieve **31.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.2 kg (76.4%)	81 %	4
Grain	Malteurop Wiedeński	1 kg (18.2%)	79 %	8
Grain	Viking Dekstrynowy	0.3 kg (5.5%)	79 %	13

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Magnum	15 g	90 min	12 %
Boil	Lublin (Lubelski)	35 g	30 min	4 %
Boil	Lublin (Lubelski)	35 g	15 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	30 g	5 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Dry	22 g	---

### Extras

Type	Name	Amount	Use for	Time
------	------	--------	---------	------

Fining	whirlfloc	3 g	Boil	15 min
--------	-----------	-----	------	--------