

## carpils

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **39**
- SRM **3.5**
- Style **German Pilsner (Pils)**

### Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **27.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

### Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **1 min**

### Mash step by step

- Heat up **15.3 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **17.1 liter(s)** of **76C** water or to achieve **27.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.1 kg (80.4%)	81 %	4
Grain	Weyermann - Carapils	0.7 kg (13.7%)	78 %	4
Grain	viking malt cookie	0.3 kg (5.9%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lublin (Lubelski)	80 g	60 min	4 %
Boil	Lublin (Lubelski)	20 g	20 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
w34/70	Lager	Slant	500 ml	---

### Notes

- [franekca.pl.tl](http://franekca.pl.tl)  
Mar 31, 2018, 9:58 AM