

## 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