

pils z PK

- Gravity **9.3 BLG**
- ABV **3.6 %**
- IBU **40**
- SRM **4**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **46 C**, Time **0 min**
- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **50.3C**
- Add grains
- Keep mash **0 min** at **46C**
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|--------------|-------|-----|
| Grain | Weyermann - Bohemian Pilsner Malt | 4.5 kg (90%) | 81 % | 4 |
| Grain | Strzegom Monachijski typ I | 0.5 kg (10%) | 79 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil | Marynka | 30 g | 60 min | 10 % |
| Aroma (end of boil) | Saaz (Czech Republic) | 30 g | 10 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|-------|------|--------|------------|
| w34 | Lager | Dry | 23 g | --- |