

germańskie

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **29**
- SRM **3.2**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **90 min**
- Evaporation rate **5 %/h**
- Boil size **32.3 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

Steps

- Temp **50 C**, Time **30 min**
- Temp **65 C**, Time **30 min**
- Temp **70 C**, Time **30 min**
- Temp **76 C**, Time **0 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **55C**
- Add grains
- Keep mash **30 min** at **50C**
- Keep mash **30 min** at **65C**
- Keep mash **30 min** at **70C**
- Keep mash **0 min** at **76C**
- Sparge using **21.8 liter(s)** of **76C** water or to achieve **32.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|-------|-----|
| Grain | Weyermann - Bohemian Pilsner Malt | 5 kg (95.2%) | 81 % | 4 |
| Grain | Weyermann - Carapils | 0.25 kg (4.8%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Saaz (Czech Republic) | 60 g | 60 min | 4.5 % |
| Boil | Saaz (Czech Republic) | 20 g | 15 min | 4.5 % |
| Boil | Saaz (Czech Republic) | 30 g | 5 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|---------|------------|
| Saflager W 34/70 | Lager | Dry | 14.38 g | Fermentis |