

176 Italian Pils

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **41**
- SRM **3.8**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **15 %**
- Size with trub loss **19.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **24.1 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4.1 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **67 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **69.4C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **9.5 liter(s)** of **76C** water or to achieve **24.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|-------|-----|
| Grain | Weyermann - Bohemian Pilsner Malt | 4.5 kg (95.7%) | 81 % | 4 |
| Grain | Weyermann - Carapils | 0.2 kg (4.3%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|----------|------------|
| Boil | Saaz (Czech Republic) | 25 g | 60 min | 4.5 % |
| Boil | Saaz (Czech Republic) | 25 g | 30 min | 4.5 % |
| Boil | Saaz (Czech Republic) | 30 g | 20 min | 4.5 % |
| Boil | Saaz (Czech Republic) | 30 g | 10 min | 4.5 % |
| Boil | Saaz (Czech Republic) | 40 g | 1 min | 4.5 % |
| Dry Hop | Tettnang | 50 g | 5 day(s) | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|-------------|-------------|---------------|-------------------|
| Lalbrew - Novalager | Lager | Dry | 22 g | --- |