

# German pils tg 2019

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **27**
- SRM **3.9**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **27 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **35.8 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **23.4 liter(s)**
- Total mash volume **30.1 liter(s)**

## Steps

- Temp **53 C**, Time **10 min**
- Temp **65 C**, Time **50 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **23.4 liter(s)** of strike water to **57.7C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **50 min** at **65C**
- Keep mash **5 min** at **76C**
- Sparge using **19.1 liter(s)** of **76C** water or to achieve **35.8 liter(s)** of wort

## Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Weyermann - Pilsner Malt   | 5.5 kg (82.1%) | 81 %  | 2.5 |
| Grain | Strzegom Monachijski typ I | 1 kg (14.9%)   | 79 %  | 16  |
| Grain | Zakwaszajacy               | 0.2 kg (3%)    | 79 %  | 5   |

## Hops

| Use for | Name      | Amount | Time   | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil    | Magnum    | 25 g   | 60 min | 12 %       |
| Boil    | Tradition | 10 g   | 0 min  | 6 %        |
| Boil    | Tradition | 10 g   | 10 min | 6 %        |

## Yeasts

| Name                 | Type  | Form   | Amount | Laboratory       |
|----------------------|-------|--------|--------|------------------|
| FM31 Bawarska Dolina | Lager | Liquid | 250 ml | Fermentum Mobile |

## Notes

- 3 pokolenie 1. dyszka 2. dortmunder  
*Jan 26, 2019, 12:51 PM*

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.