

# 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.