

# German Pils

---

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **44**
- SRM **4.6**
- Style **German Pilsner (Pils)**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.1 liter(s)**
- Total mash volume **9.4 liter(s)**

## Steps

- Temp **55 C**, Time **10 min**
- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **15 min**
- Temp **100 C**, Time **10 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **7.1 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **30 min** at **63C**
- Keep mash **20 min** at **72C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **76C**
- Keep mash **10 min** at **100C**
- Sparge using **8.5 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński premium	1 kg (42.6%)	81 %	4
Grain	Strzegom Wiedeński	1 kg (42.6%)	79 %	10
Grain	Weyermann - Acidulated Malt	0.1 kg (4.3%)	80 %	6
Grain	Castlemalting - Cara Clair	0.25 kg (10.6%)	78 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau	20 g	60 min	3 %
Boil	Izabella	15 g	60 min	5.8 %
Boil	Hallertau	30 g	15 min	3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
------	------	------	--------	------------

FM31 Bawarska Dolina	Lager	Liquid	30 ml	Fermentum Mobile
-------------------------	-------	--------	-------	------------------

### Extras

Type	Name	Amount	Use for	Time
Fining	Whirlfloc	15 g	Boil	15 min

### Notes

- zacieranie dekokcyjne  
55°C - 10min  
63°C - 30min  
Odebrana 1/3 zacieru  
72°C - 15 min dekokt  
100°C - 10 min dekokt  
72°C - 20 min  
*Dec 22, 2019, 10:25 AM*