

## GERMAN PILS #3

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **42**
- SRM **3.7**
- 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 **10 %/h**
- Boil size **33.1 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **23.9 liter(s)**

### Steps

- Temp **55 C**, Time **5 min**
- Temp **65 C**, Time **70 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **18.6 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **5 min** at **55C**
- Keep mash **70 min** at **65C**
- Keep mash **5 min** at **76C**
- Sparge using **19.8 liter(s)** of **76C** water or to achieve **33.1 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pilsner Malt	4.5 kg (84.9%)	81 %	5
Grain	Weyermann - Vienna Malt	0.3 kg (5.7%)	81 %	8
Grain	Weyermann - Carapils	0.3 kg (5.7%)	78 %	4
Grain	Weyermann - Acidulated Malt	0.2 kg (3.8%)	80 %	6

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	30 g	60 min	12.1 %
Boil	Tettnang	50 g	10 min	4 %
Boil	Tettnang	50 g	5 min	4 %